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CLINICAL LECTURE

ON THE

TREATMENT OF ANEURISM AND STONE IN THE BLADDER.

BY

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Clinical study in the College Hospital. Aneurism of the thigh cured by means of the "presse artère" over the femoral artery. History of aneurismal operations and practice. Edinburgh practice. Mode of using apparatus for compressing aneurism.—Stone in the bladder destroyed by lithotrity. Circumstances rendering lithotrity more desirable than cutting. Lithotrity in Great Britain. Comparison of different instruments. Comments on the case, and lithotrity generally.

GENTLEMEN,—As the session has now fairly commenced, and you have, in some measure, settled down to your attendance upon the various lectures in the school opposite, it may be expected that some explanation should, from time to time, be given of the treatment pursued in the cases which present themselves in this hospital,—that, in fact, we should have some practical in connection with theoretical instruction. Every facility is here afforded for your study of disease, both in the surgical and medical wards, a correct record being kept of the previous history of each patient, and of his condition at the period of his admission. The progress of the case is carefully noted, together with the signs and symptoms of the disease, and the mode of treatment is also fully indicated. Whilst pathology is thus attended to, the morbid appearances are not allowed to pass without notice. Moreover, the reasons for pursuing the various methods of cure are fully explained, as they are applied in the wards and at the patient's bedside; still there are many remarks which cannot with propriety or convenience be made during the visit, and, accordingly, we have been in the habit, as cases deserving of remark presented, to meet here, and enter more fully on the subject of disease and its treatment. The two first cases to which I propose drawing your attention at this time, are of very great interest to the practitioners and students of surgery, viz., aneurism of the thigh, and stone in the bladder. When you are told that a patient labouring under one or other of these diseases has presented himself for relief, you may naturally enough expect to witness a painful and hazardous surgical proceeding,—a "capital operation," as you have been taught to call it. The two patients, the history and treatment of whose cases I have to report, were neither of them, however, subjected to any very painful process. They were speedily and effectually cured of their maladies without the loss of a single drop of blood, and after comparatively slight suffering. First, then, what the case-book says of the

ANEURISM OF THE THIGH.

J. W., ætat. 30, admitted on the 13th of July, 1843, under the care of Mr. Liston. A thin, spare man; a tin-plate-worker; married; of temperate habits; no hereditary predisposition to any disease; always enjoyed good health until about two years ago, at which time the calf of his left leg became swollen, extremely hard, and very painful; the pain extended down the leg and foot. He was attended by a medical man, who applied various external applications to the swelling, which, however, had not the effect of dispersing it, or of alleviating the pain; but a large superficial ulcer was produced. He was afterwards attended by a quack, who also applied various external applications to the ulcer, which had the effect of increasing its depth; he also made a free incision in it: allow the discharge to escape more freely. The ulceration went on extending, and in a few days afterwards severe hæmorrhage took place, which caused repeated fainting. Stimulants were freely administered, and a large coagulum formed, which had the

effect of stopping the hæmorrhage, and he had no return of it. His strength was gradually restored, and in the course of a few months the wound healed up. He continued quite well until the last week of May, when he suffered severely from pain at the inner side of the thigh, at the junction of the middle with the lower third; the pain was increased by moving about. In the course of a few days he perceived a small tumour in that region; this continued to increase in size, and he now applied for advice at an institution, when he was informed that it was a scrofulous inflammation, and was ordered to poultice and apply warm fomentations to it; he was also ordered some medicine. The abovementioned treatment was continued for about a fortnight. During this time the tumour continued to increase in size, and became more painful. After returning home one day he read an account of numerous diseases, and found that the symptoms of which he complained corresponded to the description given of aneurism. On the following day he again went to the institution, and pointed out to the medical men the pulsating character of the tumour. They were now convinced that it was an aneurism, and proposed an operation for the cure of it, but he declined to acquiesce in their request, stating as his reason for not doing so that he should prefer having the operation performed by Mr. Liston.

Present State.—The tumour has been increasing since its first appearance. He has been prevented from following his occupation for the last month. There is swelling at the lower third of the thigh, on its inner aspect, in the situation of the femoral artery, as it is about to pass through the adductor magnus muscle. The tumour extends upwards from this point; it is not discoloured; it is distinctly seen to pulsate on confining a portion by means of two fingers; the pulsation in it is very evident to the touch on pressing with a finger, or by laying the hand over it. On compressing the femoral artery the pulsation in the tumour ceases, and on removing the pressure it returns. The pulsation exists in every part of the tumour, and extends in every direction. By the stethoscope the bellows-murmur is loudly audible. He complains of a dull, pulsating kind of pain in the swelling, and states that he has scarcely slept for the last month. His appetite for the same period also has been very poor. Tongue furred, but moist; bowels confined; urine in sufficient quantity, and of a natural colour; pulse 88, strong. Ordered to take two opening pills.

July 14. Tongue cleaner; his bowels have not yet been relieved.

15. A bandage was applied from the toes, nearly up to the groin, making pressure on the aneurism. Ordered to take another pill.

16. His bowels have been relieved by the medicine. This day a "presse artère" was applied over the femoral artery, at the lower part of its upper third; the instrument was screwed sufficiently tight to stop all pulsation in the tumour. He was not able to bear the pressure of the instrument for more than half an hour; it was accordingly slackened somewhat, and pulsation to a certain amount returned. The foot and leg were bandaged before the application of the instrument.

17. He kept the instrument on until three, a.m., this day, when he loosened it, as he was unable to get any sleep.

18. Pulse 122; he feels ill; the thigh is swollen, but the foot and leg are not so. He kept the instrument on all day yesterday, and all last night.

19. Feels better; pulse 108, strong. He is able to bear the instrument tighter than before, though not enough so to prevent pulsation entirely.

20. He slept well last night, the first time for the last month. The swelling has disappeared from the thigh, and the tumour is flatter. The tumour is not harder than it was before, and on taking pressure off the femoral artery pulsation exists to a considerable degree, but not so powerfully as on admission. His pulse is 96, moderately strong, and he expresses himself as feeling altogether different from what he did before the instrument was used.

21. Slept well last night. He still keeps the instrument on day and night.

23. Pulse 100, strong and full. He has recovered his appetite, and he sleeps well at night.

25. The pulsation is stopped by the compression of the artery. There is greater hardness about the tumour.

27. There is still greater hardness in the thigh. The swelling has completely subsided.

31. The sac appears to be empty when the compression is kept up on the artery. Much less force is required to keep the tumour pulseless than formerly.

Aug. 7. The pulsation is still felt when pressure is removed.

16. Continues much the same. The hardness has extended.

24. The coagulum appears to be undergoing absorption.

28. Mr. Liston ordered the tourniquet to be removed, but pulsation returning it was reapplied.

31. He continues very well in health. The leg feels exceedingly comfortable. Pulsation can still be felt in the centre of the sac when pressure is removed.

Sept. 4. Pulsation is still perceptible, and a murmur is heard by the aid of the stethoscope.

6. Murmur still heard, but appears to be

venous, it being continuous; slight pulsation still perceptible.

10. Yesterday afternoon he experienced great pain in the knee, extending down the leg, also in the ankle-joint and foot. It continued about six hours, when he fell asleep, and passed a good night; on waking this morning the pain had left. Mr. Hearne examined the sac this morning, when he could discover neither pulsation or murmur.

16. Pulsation has not returned. The bandage has been kept applied, and he has continued the use of the instrument when up, but leaves it off when in bed; feels no pain or uncomfortable sensation.

18. The tumour is rapidly disappearing, also the induration around fast subsiding.

23. Scarcely any tumour perceptible.

24. Discharged, cured.

Here, then, was a disease of a serious nature, rendering the limb almost useless, affecting the man's health, and making rapid advances. The disease might probably have taken a favourable turn. The pulsation might have ceased; the tumour might have become consolidated. The circulation through the sac might have been put a stop to by the coagulation of its contents, and the collateral circulation might have been fully established without accident. But the chances of this occurring were not great, perhaps, as one in a hundred, if not more, and thus not to be reckoned upon. In the records of surgery are to be found well authenticated cases of spontaneous cure. Some assisted by and attributed partly to the employment of means calculated to lessen the rapidity and force of the general circulation. There are several cases and dissections recorded by the late Mr. Ford (well known as the author of an admirable work on disease of the hip-joint) in the 9th volume of the "London Medical Journal," conducted by Dr. Simmons, with some very good remarks on the obliteration of the principal trunks and the enlargement of the anastomosing and collateral branches, and which very possibly led to the improvements in the operation for aneurism. The probability, however, was, that the tumour would have gone on increasing pretty rapidly—that the limb would have become more and more swollen by serous effusion into the cellular tissue; that the knee, perhaps, would have become stiffened, and the motions of the limb almost entirely lost. Then possibly the sac might have given way with rapid effusion of arterial blood into the intermuscular and subfascial filamentous tissue. Thus the vitality of the limb might have been endangered, and perhaps, also, the patient's life. Or, again, supposing that all remedial means had been withheld, that the patient would not submit, as has happened, to means being adopted for arresting the flow of blood into the sac, the coverings might at last, after great distention, have become thinner, and by their sloughing the contents of the sac or of the arterial system might have been poured out to a fatal extent.

You well know that aneurisms of the limbs and some of those of the neck, and even of the trunk, are now curable by surgical means; that the practice and writings of Ford, John Hunter, Scarpa, John Bell, Abernethy, and Astley Cooper, have led to the successful performance of operations, founded on sound principles, for this disease in situations long thought inaccessible. These operations, however, are not always unattended by risk. Some vessels cannot be cut down upon and embraced by ligature, however skilfully it may be set about, without a very great chance of some untoward event arising. The vessels operated upon are often unsound in their coats. The ligature can, in some cases, for good and sound anatomical reasons, only be applied at points unfavourable for the formation of coagulum, which is well known to be essential to the obliteration of the trunk operated upon. Then again, near the heart, the current of blood is so impetuous that the necessary changes essential to the permanent closure of the tube is liable to interruption. But it is not here only that untoward results follow upon the performance of the operation for aneurism; even at a distance from the heart, and in vessels favourable in every respect, as regards distribution, for ligature, untoward circumstances have arisen, such as secondary hæmorrhage and mortification; not a few patients have died after the ligature of the femoral, and their deaths have been the result of the operation, not of the disease. Death from hæmorrhage or from mortification after the operation for popliteal aneurism was so common some seventy or eighty years ago that the best surgeons of their day in this country, as Pott, Allanson, and others, almost uniformly recommended and performed amputation of the thigh in preference to any operation for the obliteration of the vessel and sac. Then, in 1785, came the brilliant improvement upon the operation for aneurism so situated, the proposal of Mr. Hunter. Still, for a series of years, the treatment of the vessel exposed for ligature was imperfectly understood, and many were the clumsy proposals for preventing the coats being cut through too quickly, to which was attributed the bursting of the vessel after a time, and the alarming secondary hæmorrhage. By the experiments and pathological observations of Jones and John Thomson, surgeons began to be impressed with the propriety of disturbing the vessel as little as possible, and of applying, when practicable, but one ligature. But with all the improvements which have been made in operative procedure guided by correct anatomical and pathological knowledge, the operations on large vessels are not yet unattended by danger. In the root of the

neck some of them will be ever fraught with the greatest danger, and continue the source of the deepest and most harassing anxiety to the surgeon immediately interested. But even yet the operations on the femoral artery are attended with some risk, slight though it may be. In the old London Hospital I shall never forget that two patients died of secondary hæmorrhage after ligature of the vessels for aneurism of the lower limb, and that during the first week that I joined it as a pupil. Not a few, to my knowledge, have died from the same cause in other hospitals and in private practice since I began the study of the profession. At this period, I should guess, a patient would scarcely be allowed to die of secondary hæmorrhage from a wound of the thigh, however high, without an attempt being made to arrest it. But there is, again, phlebitis and mortification to be dreaded. These are not common occurrences. Phlebitis, indeed, is not likely to result unless the vein is somehow implicated. It has been wounded sometimes in detaching the artery, and it may also suffer from the incautious use of the needle. The vein has even been included in the ligature, and this happened, it appears, in the second case in which Mr. Hunter operated, as related by Mr. Home in the first volume of the old "Medico-Chirurgical Transactions." The superficial veins swelled enormously. The wound was dressed from the bottom. There were extensive abscesses, and the patient died, as Mr. Home says, not from the operation, but from the after-treatment! The mistake was one into which we should not have supposed so great a physiologist would have fallen. But it is the lot of mortals to err, and the greatest are not exempt from making mistakes. From mortification many patients, have been saved by recourse to amputation of the limb. Our patient was, as you have heard, subjected to no operation, properly so called. The coagulation of the contents of the aneurismal sac was brought about by pressure on the arterial trunk, gradually applied and sustained.

This is by no means a novel proceeding; it is one which must have suggested itself to surgeons in the very infancy of the art. The pressure has been applied to the aneurismal sac, the limb being previously bandaged from the extremities. You know that in recent aneurism, and before the formation to any great extent of lamellated coagula, the sac can be emptied by moderate and continued pressure. The pulsation can also be stopped, and the tumour made to shrink by pressure on the arterial trunk betwixt the heart and the diseased part. We find in the records of surgery several cases of cure by a continuance of the pressure by means of compresses, bandages, and by various modifications of the tourniquet. Guattani, Richerand, and Dupuytren, have recorded such cases. The attempt has been made, and, in some instances, successfully, in this country. I believe a case was cured by Mr. White some years ago in the Westminster Hospital. If I mistake not, Sir Everard Home made the attempt on a pensioner in Chelsea Hospital; but it was followed in this instance by mortification and death. Various other means have been proposed and put in practice with the view of causing coagulation of the blood in aneurismal sacs. Some are useless, others, however, not unattended with risk. Moxas have been applied to the surface; hot wires have been pushed into the sac, and needles connected with a galvanic battery have been also brought in contact with the blood in the tumour.

The application of pressure on the vessel betwixt the heart and the aneurism has been renewed of late, within these few months, in fact, by some of the Dublin surgeons. Mr. Hutton records the first case, in which the pressure was applied, at first gradually, and only efficiently after the patient had got accustomed to it. My friend, Mr. Cusack, immediately after this employed the method, and, in fact, it is to this gentleman that I am indebted for the first intimation of the trial and successful issue of the method in these cases. Mr. Bellingham has recorded a third. You have witnessed the result of a fourth case; and I have very little doubt that the plan will be followed speedily by others, and that in very many cases the ligature of the femoral artery will be superseded. In the upper extremity pressure has been applied repeatedly with success; in fact, the first interesting case I had to comment upon in this hospital was one of aneurism at the bend of the arm following bleeding, and which, after no very severe or long-continued pressure, became consolidated and disappeared.

Some patients will be found unwilling to submit to the irksomeness and suffering caused by the pressure. My old friend, the professor of clinical surgery in the Edinburgh University and Hospital, writes to me of a case which occurred to him very lately:—

"I tried compression," he says, "in a case of aneurism at the bend of the arm from bleeding, but not long, as the patient, a stout country lad, full of blood and spirit, declared it intolerable, and prayed for the operation. Having performed it at least half a dozen times without any bad effect, I did not hesitate to comply, but got a fright. At the end of a week hæmorrhage took place repeatedly, and the arm swelled. I tied the humeral, and before long there was another discharge of blood, I suppose from the lower orifice. I then desired the amputating apparatus to be in readiness; but, happily I had no occasion for it, as things went on well, and the patient is now about able to leave the hospital. The proximity of the median nerve must be an obstacle to effec-

tual compression of the humeral. However, I saw a case last winter, where a very small aneurism from bleeding was remedied by a screw pressing on the orifice of the vessel."

This shows what may happen to the most judicious and expert surgeons in dealing with vessels even far removed from the heart, and may be urged as a powerful argument in favour of the compression, where it is practicable. The operation, on the thigh, after all, however, is perhaps one of the most satisfactory and successful in surgery, and one which, by careful study of the structure of the parts, you should prepare yourself to undertake. Cases will still occur in which it may be absolutely necessary to have recourse to it, as wounds involving the vessel, cases of bursted sac, &c. You should, however, practice the operation on all possible occasions on the dead body, and learn the use of the instruments, which are simple enough; "for no workman, I believe, exercises his tools the worse for having learned to use them."

It now remains for me to say but a very few words as to the apparatus by which the compression was made. It must at once be apparent to you that compression by a circular band (as the screw tourniquet in ordinary use) could not be persevered in without immediate risk of mortification from the complete arrest of the blood in its passage from the extremity. The pressure ought to be made on the principal vessel, and that as accurately as possible. Of course there must be a point for counter-pressure. This, by some of the gentlemen whom I have mentioned as practising the proceeding in Dublin, has been diffused by the interposition of a splint on the back of the limb. We found that the patient could keep up sufficient pressure without annoyance by means of this simple instrument, which is to be found in some of the instrument-makers shops. It is sold as the tourniquet of Signoroni, of Padua. I dare say it may be modified a little, so as to answer the purpose with less inconvenience. It may be made wider in its span, so as to embrace the pelvis and allow the pad to be fixed on its brim. This, of course, will be looked to in other cases. You will not have failed to notice that during the compression exercised on the trunk of the superficial femoral artery by the ring tourniquet, the lower part of the limb, from the toes upwards, was carefully bandaged, and that a compress was secured by the bandage over the aneurism. The result of the case has been no less gratifying to those who witnessed its progress than satisfactory to the patient himself.

Now, then, for the second case, equally important, cured also without having recourse to bloody operation.

STONE IN THE BLADDER.

J. J., ætat. 60, admitted August 28, 1843, under the care of Mr. Liston; a shoemaker, married. Conformation rather slight; habits intemperate; no hereditary predisposition to any disease. Is a native of Yorkshire, but has resided in London for the last thirty years. Always enjoyed good health until last August, when he had some difficulty in passing his water, and an inclination to do so much oftener than usual, and when passing in a full stream it would suddenly stop; but by shifting his position he was generally able to pass some more; usually, after passing his water, he had violent pain in the lower part of the hypogastric region, and also in the penis; the time of its continuance varied from one to three or four hours. About the latter end of the month he applied for advice at a dispensary, and became an out-patient. The medical officer under whose care he was, sounded him, and stated that there was no stone in the bladder, but that the symptoms above-mentioned were caused by disease of the prostate gland. Some medicines were given him, but the patient, finding that they procured him no relief, placed himself under the care of another medical man, who ordered him to have a catheter passed twice a week. This treatment was continued for some time, but deriving no benefit from it, he applied for advice at a free hospital, and became an out-patient. He was again sounded, and it was again stated that the symptoms of which he complained were caused by disease of the prostate gland. He continued under treatment for some months, but the symptoms were not in the slightest degree alleviated; on the contrary, he thinks he has been gradually getting worse for the last five or six weeks, and he was told that nothing more could be done for him.

Present Symptoms.—Has frequent inclinations to pass his water, and it is occasionally passed almost unconsciously; when making water the stream frequently becomes suddenly stopped, but by shifting his position he is generally enabled to pass some more; has never observed any blood in his urine; states that he has, at times, very severe pain in the lower part of the hypogastric region, in the penis, and also in the heels. Mr. Liston sounded him this day, and distinctly detected a stone in the urethra, just anterior to the prostate gland.

August 29. The patient was obliged to return home yesterday evening, and on his way he felt a great inclination for making water, and which, after great difficulty, he was enabled to do; he observed there was a quantity of blood mixed with the urine, and he believes that he must have passed the stone at the same time, as he heard a sound similar to that which is produced by dropping a pebble, but he was unable to ascertain

whether such was the case or not; urine rather high-coloured, but it contains no blood, specific gravity .1020, alkaline re-action, no albumen can be detected by heat or nitric acid; bowels open; tongue clean; appetite good.

Sept. 1. Mr. Liston introduced a small scoop into the urethra, but could find no stone; but in passing the instrument he detected a considerable dilatation in the urethra just anterior to the prostate gland, where, no doubt, the stone had lodged.

2. The patient still complains of great pain in the lower part of the hypogastric region and also in the penis, more especially after making water; the urine contains an excess of the phosphates.

℞ *Dilute nitric acid*, twenty minims;
Pariera infusion, one ounce. Make a draught, to be taken three times a day.

5. The bowels have not been opened for the last three days.

℞ *Castor oil*, half an ounce.

6. The bowels were freely opened by the medicine.

10. Mr. Liston, from the symptoms, suspecting that the stone, instead of having been discharged, as the patient supposed, had been dislodged from its place in the urethra and had slipped back into the bladder, this day introduced the lithotrite; he detected it without any difficulty in the fundus of the bladder, and having ascertained that it was of small size, he crushed it, and then introduced the scoop and removed a considerable portion of it. The patient was ordered to have a warm bath in the evening.

11. He has not had a good night, not from pain, but from his great joy at having got rid of his enemy; has passed his urine freely, together with small fragments of the calculus; bowels open.

12. Is going on favourably; composition of calculus, oxalate of lime coated with the mixed phospates.

15. The urine has an acid re-action to-day.

17. Continues to go on well; has no pain now after passing his water.

19. States that he feels quite well.

20. Complains of slight pain in the right testicle, which, however, does not appear to be at all swollen; bowels not open; temperature of the skin natural.

℞ *Castor oil*, half an ounce.

21. The bowels were freely opened by the medicine; he complains of severe pain in the right testicle to-day; skin hot and dry.

22. The right testicle still continues extremely painful, and is now so very much swollen that the scrotum is exceedingly distended and its rugæ entirely effaced; he also complains of severe pain in the lumbar region; skin hot and dry; feels very thirsty; pulse hard and quick. Fifteen leeches to be applied to the right testicle.

23. Has very little pain in the testicle to-day; is still rather feverish; bowels have not been opened for the last two days. To have a senna draught.

25. Has no pain in the testicle; bowels regular; is nearly well.

27. Continues free from pain, and the testicle is now but very slightly swollen.

30. Passes his water freely and has no pain afterwards.

Oct. 2. Feels quite well.

4. Discharged cured.

This was in all respects a very favourable case for the operation of crushing the stone. The urethra and bladder being pretty free from irritability, and, further, there being no reason to suspect disease of the kidneys; the stone, moreover, was evidently of no large size. It had been ascertained to be capable of passing the orifice of the bladder, and the symptoms were of short duration. In a great many cases that present themselves matters are found in a far different condition; the stone is large, as can be ascertained by the judicious use of the "key of the bladder," as the sound has been called by some old surgeons. The symptoms have endured long. The urine deposits much mucus, and is passed often with much suffering, showing that the bladder is affected by chronic inflammation and great irritability. The urine, besides, contains, perhaps, a quantity of albumen, which leads to a suspicion of the unsoundness of the kidneys. Perhaps the sound is passed with difficulty, and not without much suffering to the patient. The urethra is often, indeed, highly excitable, and so far narrowed in its diameter. Under these circumstances lithotrity cannot be contemplated. It ought not to be thought of, and will not, if the patient applies to a man who discharges his duties conscientiously, who does to others as he would be done by,—if he applies to a surgeon who has studied and understands well the structure and functions of the genito-urinary organs, and to one, moreover, who can equally well crush a stone or cut it out of the bladder. If he put his faith in a mere stone-grinder, or in a man who, despising all advancement in science, confines himself in a bigotted manner to the cutting operation, whatever the size of the stone may be, he is apt to fare badly enough. There are cases and there will always be cases, some suited for the one operation, some for the other. No doubt, as the operation of crushing the stone comes to be better understood and more generally practised, and as patients are got to apply earlier for relief (which they will be disposed to do when it is more generally known that stone in its early stages can be got rid of by an operation, unattended by great pain, and not very hazardous to life), the cases requiring lithotomy will become by degrees fewer. Possibly it may at some period be no longer required *in the adult*, and may become a matter of history.

As matters now stand, a surgeon must be able to practise both plans, and to decide upon the preferable one in each individual case, otherwise he cannot properly conduct the treatment of such patients as put themselves under his care. The stone may, in some cases, be of a large size, and yet other circumstances may be favourable. The patient, however, may have made up his mind to submit to crushing only; such a case presented itself to me in private practice, whilst this patient, was under treatment here. There was no irritability of parts, no reason to suppose but that the kidneys were perfectly sound, and the urethra was most capacious. The lithotrite was introduced to ascertain the dimensions of the stone. It was seized in its long diameter, so that the screw could not be applied. But by shaking the foreign body out, and taking another good hold of it, its disruption was readily effected, and a perfect cure obtained by only two additional sittings. An impression has gone abroad that I am opposed to the operation of lithotrity. That I certainly am not, though I have opposed vehemently enough some of the professed stone-grinders, and have shown up the hollowness of their pretensions. I believe I was amongst the very first to make a trial of the operation in this island after having visited my friend, Dr. Civiale, the most expert and learned of lithotritists, and possessed myself, at no small expense, of all his apparatus. I certainly was the first to cure a patient by crushing the stone in Great Britain. The case is recorded in the "Edinburgh Medical Journal." The concretion was one formed on seeds of barley, which had been introduced by a foolish old man along the urethra into his bladder. Since then I have continued to practise the operation in all favourable cases, and with the most efficient instruments that could at the period be obtained. With the very imperfect instruments used in 1828 the lithotritists professed, with as much confidence as they have done since, to cure almost every case of stone, though the tools were then more suited to entangle the mucous coat of the bladder and the veru montanum, then to seize, or, at least, to act efficiently on the foreign body. The case is now very different. The instruments are much simplified, and now are really suited, in good hands, to lay hold of a stone and reduce it to fragments. The complicated machinery of the rectangular bed, the vices, the hammers, &c., are now dispensed with. The patient is no longer strapped down and fixed by a crooked tool, the one end in his bladder, to an iron rod passing through the strong wooden frame on which he used to be placed. The patient reclines on his couch or bed, his nates being merely raised by a pillow. The instrument suited by its construction to pass readily, to open and receive the stone, and to *close completely* after its reduction to fragments, is put in motion by means of a thumb-screw. The fragments are afterwards easily crushed by the pressure of the hand upon the scoop (not the rascally tool sold in this country as a scoop), and, if need be, the force of the screw can be called into action so as to reduce the detritus more completely and close sufficiently the blades of the instrument for its easy withdrawal. Here are before you, I believe, almost all the instruments (there have been many trifling modifications) which have been contrived for this operation. The original ones of Civiale, those of Heurteloup, of Segalas, of Jacobson, the screw lithotrite of Weiss, the scoop of Civiale, of Charrière, &c. &c.

You will observe that in this case I sounded in the first instance with a common sound, with a short curve, and detected with it the foreign body in the urethra. But when I suspected that the stone had fallen back into the bladder, I at once resorted to the lithotrite in order to discover it, and it is well that you should be aware that by means of this instrument small stones can often be detected after they have been missed in a search with the solid sound, and when detected they are grasped and at once reduced to powder.

Then, again, in the first instance, I had proposed to seize the stone in the urethra and extract it from thence, and this is a process by no means easy of execution. Stones or fragments lodged in the urinary passage often cause great and serious annoyance and risk to patients; they become fixed in various situations, from the point where this one lodged, behind the sinus, to the orifice: the further back of necessity the greater is the difficulty of removing them. Oil has been injected, and water, and various sorts of forceps have been contrived to seize foreign bodies so circumstanced, all being inefficient. The attempts have failed over and over again, and it has been at last found necessary, in order to save the patient from the horrors of retention and its consequences, to cut down through the coverings of the passage, to open it, and thus extract the stone. This ought, if possible, to be avoided. There is still another alternative, and that is to push the stone, if practicable, back again into the bladder, there to be dealt with by the crushing apparatus. By getting a small scoop behind the stone it can often enough be turned out. But of all the instruments I have seen or tried this modification of a scoop is most to be relied on.

By this instrument, a very simple one, I disengaged the stone I now show you, and

removed the greater part of it from the very posterior part of the canal, from a pouch, in fact, at the apex of the prostate, if not, indeed, in the substance of the gland itself. You will observe that means are here afforded for reducing the size of the fragment, if it does not come readily along the canal; but if a foreign body passes the orifice of the bladder, and can be seized as I have described, there will seldom be great difficulty in bringing it along to the very external orifice of the urethra, and from that it can be disentangled by a very slight dilatation.

The operation of lithotrity may now be looked upon as tolerably perfect; and if proper cases be selected, it is likely to be very successful in its results, and to be much less dangerous than even lithotomy performed in the best manner and by experienced operators. It certainly is not likely to be attended with the same risks and the same dreadful mortality that attended upon it in the first few years after its introduction. We then heard of the instruments breaking in the bladder, and, what was worse, of their bending in such a way that they could not again be extracted from the viscus. Then came all sorts of incisions and attempts to twist back the blades of the instrument. I need not tell you that many patients who, if subjected to lithotomy, would probably have recovered without accident, were sacrificed to these insane attempts by incompetent men, with insufficient means. Now no such dread need be entertained, as apparatus in every way suited for the purpose is to be had. The operation, I may say, in conclusion, is not well adapted to young subjects. The parts in them are excessively irritable, and the stones are, in the majority of cases, excessively hard. The fragments are got rid of with difficulty, and altogether I firmly believe that the operation of lithotomy is much to be preferred for young patients. I venture to express this opinion after having had ample experience. The operation of cutting children for stone, I may add, is unattended, in the hands of an experienced and expert surgeon, with risk of any kind, and, indeed, the mortality is not, or should not be, worth noticing; say one death in some hundreds of cases.

PRODUCTION OF PREMATURE LABOUR.

To the Editor of THE LANCET.

SIR,—If the following reports are of sufficient interest, you will much oblige me by inserting them in your widely-circulated Journal. I remain, Sir, your most obedient servant,

R. FORESTER WELLS, M.R.C.S.
Steward-street, Bishopsgate Without,
Oct. 18, 1843.

CASE 1.—Mrs. R., a delicate woman, of spare habit and short stature, was taken in labour with her first child on Friday evening, March 29, 1839, and on Sunday morning the liquor amnii escaped. On Monday, at nine o'clock, a.m., I was requested to see her under the following circumstances:—The uterus was acting violently every three minutes, its mouth almost completely dilated, and with the vagina very much swollen and excessively tender; the child's head in its natural position, fixed between the promontory of the sacrum and the pubis, and I was informed that it had been so for the previous twelve hours; the pulse was full and quick; much pain in the head; the tongue coated with a white fur, and the patient in a very restless state; the bowels had recently acted, but no water had passed for twelve hours. Sixteen ounces of blood, very buffy, were drawn from the arm, and the water was drawn off to the extent of ten ounces.

At two o'clock, p.m., the child's head being in the same situation, I attempted, but unsuccessfully, to apply the long forceps; but after two hours and a half labour succeeded in delivering her with the perforator and craniotomy forceps. I then ascertained that the antero-posterior diameter of the pelvis was below three inches. She had a favourable recovery.

On the 13th of August, 1840, I was called to attend the same patient in labour at the seventh month; there was alarming hæmorrhage; the feet presented, and the os uteri was perfectly dilated. I ruptured the membranes,—the hæmorrhage abated, and I succeeded in delivering the child's body in about half an hour, but was two hours in getting the head through the brim of the pelvis. The child was dead, the placenta adhered, and an unusual quantity of blood followed it. She had a very protracted recovery, I fully confirmed my previously-formed opinion of the deficiency in the dimensions of the pelvis. I then recommended the induction of premature labour at the seventh month in the event of another pregnancy, and on the 20th of December, 1841, precisely seven months from the termination of her last menstruation, I commenced at twelve o'clock, noon, giving her the mixture recommended by Dr. Ramsbotham (Obstetric Medicine and Surgery, p. 379); at the same time with the index finger of the left hand I slightly separated the membranes from the os and cervix uteri, and ascertained the presenting part to be the head. I repeated this operation at the same hour the following day, and on Wednesday, the os uteri being about one inch in diameter, soft and dilatable, I ruptured the membranes. From this time labour was fairly established and proceeded in the usual way; and at ten o'clock on Thursday evening, eighty-two hours from the commencement of the use of the medicine, and thirty-

four after the rupture of the membranes, she was delivered of a boy, which lived twelve hours. The head passed easily through the pelvis, and the recovery was rapid.

Case 2. — On the 20th of last month, seven months and a half from the last menstruation, the same patient applied to me again, and a similar practice was adopted, the membranes being ruptured rather earlier; the head, which presented, passed through the pelvis with considerable difficulty, and she was delivered of a female child, now alive and well, sixty-five hours after the first dose of the medicine, and thirty-eight after the rupture of the membranes. An inflammation of the breast slightly retarded her recovery.

Case 3. — Mrs. F., ætat. 34, of short stature, and very sanguine temperament, has been married nine years. Her first child was very small, and died a few minutes after its birth; the labour lasted seventy-two hours. Her second child was dead-born, after a protracted labour. Her third child, premature, at the eighth month; lived to be six years old. During these three labours she was attended by a midwife, and after each had an attack of uterine inflammation; Her fourth was an abortion, of the fifth month.

Her fifth child was dead-born, after a very protracted labour. It was during her sixth labour I was called to see her; a portion of the placenta, with the feet, presented; the hæmorrhage was very alarming, and there was much difficulty in forcing the head through the pelvis. The child was of six months' growth, and was large, considering the period it lived—twelve hours. In this case the pelvis is altogether small, the promontory of the sacrum projects, and the antero-posterior diameter is two inches and three quarters. I then recommended the induction of premature labour in the event of another pregnancy. She, however, did not consent, and on the 18th of March, 1842, after a very laborious labour of forty-eight hours duration, I delivered her, by craniotomy, of a large male child. Uterine inflammation followed, requiring active antiphlogistic treatment.

On the 2nd of July, 1843, being pregnant for the eighth time, and precisely eight months from the last menstruation, she consented to have labour brought on. The same practice was adopted as in Mrs. R.'s case, and she was delivered of a child (now living) fifty-four hours after the first dose of the medicine, and four after the rupture of the membranes. Very active uterine action commenced immediately after the administration of the medicine, and from my not being able to visit her sooner the os uteri was completely dilated before the rupture of the membranes.

Case 4.— Mrs. L., ætat. 24, a short and ill-made woman, after a very severe labour of sixty hours duration, was delivered of a dead child on the 20th of August, 1840, under the care of a midwife. The head, according to her own description, was flattened from side to side, and very much bruised; she recovered slowly.

On the 7th of September, 1841, she was delivered of her second child (dead), under the care of a practitioner of midwifery. The feet presented, and there was considerable difficulty in extracting the head; the child was rather below the average size.

On the 31st of August, 1842, the same patient being in labour of her third child, I was requested to see her twenty-four hours after the natural evacuation of the waters. The os uteri was perfectly dilated; a portion of it, very much swollen, was hanging down, compressed, between the child's head and the brim of the pelvis. The head was immoveably fixed, and it was impossible to introduce a finger between it and the pelvic brim at any part of its circumference. The pains, which had been very violent, had almost entirely subsided; there was great irritability. She had had no sleep for two nights, and complained of pain in the head. I prescribed thirty minims of laudanum, and on visiting her eight hours after, I found she had had some refreshing sleep. The pains were returning, but made no impression on the child's head, which remained in *statu quo*. After perforating and removing a considerable portion of the cranium, I completed the delivery with the craniotomy forceps. She recovered slowly. The antero-posterior diameter in this case is below three inches.

On the 21st of September, 1843, precisely eight months from her last menstruation, she applied, according to my recommendation, to have premature labour induced. Precisely the same practice was adopted as in the other cases, and she was delivered of a living child, sixty-nine hours after the first dose of medicine, and fourteen after the rupture of the membranes, and, to use her own expression, "never had so good a getting-up."

For the purpose of rupturing the membranes I used the stilette of a male catheter, with the index and second fingers of the left hand as a director. I had no difficulty in ascertaining the presenting part of the fœtus at the first examination in any of the above cases, excepting Mrs. F.'s, where the want of space was so great as to make it difficult to reach the os uteri.

The three methods recommended to be used, separately, by obstetric writers have been conjointly employed in these cases, namely, the separation of the membranes and slight dilatation of the os uteri, the artificial evacuation of the waters, and the administration of the ergot of rye, and, as the result proves, with complete success. Dr. Ramsbotham says he has never found the two last means fail; and I think that where the first can be accomplished with ease, it enhances

the probability of success. Dr. Robert Lee, in his "Clinical Midwifery," relates a case in which seven ounces of ergot were taken without producing the desired effect; but that is not sufficient to overthrow the mass of evidence which exists of its efficacy, not only in increasing, but likewise in originating uterine action, and used conjointly with the other means, I think there is little fear of its producing a deleterious effect on the child.

CAUSE OF COAGULATION OF BLOOD.

To the Editor.—Sir: In the present uncertainty respecting the coagulation of blood, allow me to ask whether any fact is opposed to the hypothesis that the halitus exhaled from the blood (this exhalation being the first phenomenon that is observed in coagulation) is the agent to which we should attribute the solution of the fibrin in the blood,—in a form perhaps somewhat similar to the akaline menstruum which maintains the fluidity of albumen? A heat of 120°, exposure by a broad surface to atmospheric influence and agitation, favour the separation of fibrine. These circumstances, likewise, might be expected to favour the extrication of the halitus. Cold, even to freezing, a small surface of exposure, &c., the very circumstances which lessen the exhalation, restrain the tendency of the fibrine to solidify; whilst a coating of oil effectually prevents both. As an alkaloid substance possessing properties such as I ascribe to the halitus, I would mention phosphuretted hydrogen; without, however, having any reason to suppose that that hyduret is actually the agent concerned. However, phosphuretted hydrogen is found in the blood, combined with a fatty acid. I have the honour, Sir, to remain, your obedient servant, E. C.

University College, London,
Oct. 17, 1843.

EFFECTS OF TURPENTINE ON THE DOG.

To the Editor of THE LANCET.

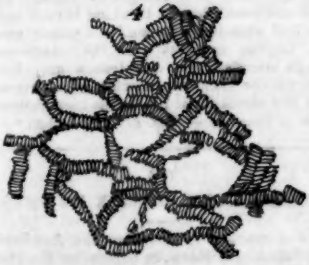
SIR,—The number of your very valuable publication for August 26th ult. (page 784), contains an article extracted from the "Veterinarian," written by Mr. Mather, on the baneful effects of turpentine on the canine species, a similar case having previously come under my own observation, but ending fatally. In the course of last autumn a gentleman called upon me, who said that he had a very valuable dog, of the terrier breed, which he thought was much infested with worms, and wished to know what I would advise him to administer for their expulsion. I told him that I was not a veterinary surgeon, but knowing the value of turpentine as a mechanical anthelmintic in the human system, and not being aware that there existed any essential difference in the economy of the dog and that of man, so that turpentine should operate on the former as a virulent poison, and on the latter as a safe and valuable remedy, and also recollecting the dose which may be administered with impunity in the human species, I at once stated that I should recommend turpentine to be given to his dog, in the dose of a small dessert-spoonful, and that, after a few doses, I had no doubt but that he would find some of the worms expelled. On the following day he called upon me, very much displeased at the advice; for immediately after administering the turpentine the dog gave a yell, reeled a few yards from him, and expired as though in a violent paroxysm of convulsions. This case very much strengthens the facts related by Mr. Mather, and confirms his views, that turpentine cannot be administered with the same impunity to the lower animals as to man. I am, Sir, your obedient servant,

R. S. NIGHTINGALE, M.R.C.S.,
Late Surgeon to the Liverpool Eastern Dispensary.
October 16, 1843.

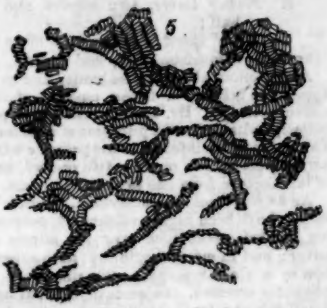
NEW MEANS OF TESTING BUFFY BLOOD.

MR. T. WHARTON JONES, in the "Edin. Med. Journ." for October, suggests the following experiments for determining, by a drop, whether blood presents those constituents which would render it "buffy" when drawn in ordinary venesection:—Draw a drop of *healthy* blood; receive it on a plate of glass; lay a thinner plate over it. Forthwith hold it up against the light, and it will present a uniform aspect, but in half a minute it will be finely mottled. If the blood be buffy, it will, treated in the same way, be more thinly spread out; and the mottle will present itself at once, and more evidently than in healthy blood at the end of a minute, in time increasing still more. Healthy blood is thicker than buffy blood. In buffy blood, the mottled appearance presents itself as soon as the examination can be made, and, more distinctly, from the largeness of the clear interspaces. If the healthy blood thus spread out be immediately examined under the microscope, the red corpuscles are observed dispersed confusedly about in the *liquor sanguinis*. (1) Such is the condition on which depends the uniform appearance first seen by the naked eye. In half a minute, or so, the red corpuscles overlap each other, and then rise up on edge, and become applied side to side. (2) Like coins in rolls, they occupy less space than when irregularly dispersed, with spaces containing nothing but *liquor sanguinis*. (3) Such is the condition on which the finely mottled appearance depends.

Buffy blood, under the microscope, presents a less number of red corpuscles. This is the cause of buffy blood being less thick. As soon as the microscopical examination can be made, the red corpuscles are found closely aggregated into rolls, with large meshes of *liquor sanguinis*. (4) Comparative fewness of the red corpuscles, and the rapidity and closeness with which they aggregate on escaping from the body, are thus the conditions on which the rapid and distinct mottling in buffy blood depends. Soon, also, disruption takes place, and the rolls collect into masses, leaving still larger intervening spaces. (5) This is the cause of the increasing distinctness of the mottled appearance to the naked eye. The arrangement of the rolls in a net-work is exhibited only when the blood is thinly spread out. When examined under the microscope, in a coagulated drop, the rolls are dispersed in every direction, constituting a sponge-work, in the interstices of which the *liquor sanguinis* in healthy blood remains contained.



Draw a drop of blood from the finger, and take a drop from a stream from a vein, in the same person. They each present, when treated as above, the same appearance,—both, either characteristic of health or of the buffy tendency. A drop drawn from an inflamed part, and one drawn from any other part of the same body, present no difference as regards the rapidity and distinctness of the mottled appearance, or the rapid and close aggregation of the corpuscles into rolls and masses, leaving large intervening spaces.



As there are different degrees in the buffy coat, so there are corresponding degrees in the distinctness with which these appearances present themselves. It is thus seen, that by examining blood from a prick of the body, as much may be inferred of the state of the blood as from the presence or absence of the buffy coat in blood drawn in a full stream.

MATICO AND MONESIA.

Dr. Hunter Lane forwarded to us a few weeks since a detailed account of his experience in the employment of the Peruvian *matico*, and *monesia*, in the treatment of various diseases; but discovering, before we had room for its insertion entire, that the author had converted his paper into a general circular to the editors of the English medical journals, and its character as an original communication having thus evaporated, we can only notice its contents as an article in the present form.

The Matico is a plant in great reputation with the South Americans for its styptic qualities.

"The leaves of the matico," says Dr. Lane, "which are the parts used, are acuminated, lanceolate, slightly crenate, deeply wrinkled, of a dark green on the upper and a pale green colour on the under surface. They vary from three to six inches long, and from half to an inch or more wide. They are imported in packages of a somewhat spherical form, presenting the appearance of having been strongly compressed while moist and subsequently highly dried, but evidently not roasted, as they are directed to be by the Peruvians for external use." From the leaves Dr. Lane has been accustomed to

make two preparations—an infusion and a tincture, the former according to the subjoined directions:—

℞ *Matico leaves*, an ounce;
Boiling distilled water, a pint.

Macerate for two hours in a lightly-closed vessel, and strain.

The tincture is made thus:—

℞ *Matico leaves*, two ounces and a half;
Proof spirit, a pint.

Macerate for fourteen days, and strain.

A decoction, also, may be made, and as it appears to take up a larger amount of the active principle, Dr. Lane considers it peculiarly suitable for the purposes of injection. The doses of the infusion in his practice have varied from half an ounce to two ounces, and of the tincture from one to three drachms.

As an injection in leucorrhœa, matico is said to have been highly efficacious, possessing decided advantages over the nitrate of silver; and in menorrhagia, by its application in a similar manner, the discharge is promptly arrested. In cases of internal hæmorrhoids the local injection of matico has (to use the words of Dr. Lane) "suspended the necessity of the use both of the knife, and of the application of nitric acid, as recommended by Dr. Houston. In cases of chronic diarrhœa and gonorrhœa it has proved but an inefficient remedy, and it manifests no emmenagogue powers, though reputed to be aphrodisiac."

"In hæmatemesis, hæmoptysis, dysentery, and certain kinds of hæmaturia (says Dr. Lane) it is well worthy of trial. In a case of diabetes I have prescribed it as the vehicle of benzoate of ammonia. Under that treatment the quantity of urine voided daily diminished from ten quarts to five in the twenty-four hours."

"The Monesia—an extract from the bark of a supposed chrysophyllum, growing in South America, whence the vegetable substance is imported into France—comes strongly recommended by the testimony of many continental practitioners. Thus, by Aliquié, Baron, Dagnac, Payen, &c., its utility is recorded in vaginal and uterine discharges, hæmoptysis, diarrhœa, dyspepsia, scurvy, bronchitis, and even phthisis."

Dr. Lane reports of it as follows:—

"In the trials which I have made of the watery extract of monesia, it has proved itself an agreeable, safe, and uniform astringent. The cases in which I have prescribed it have been different kinds of diarrhœa. In them it has never failed to manifest its astringent power over the intestinal exhalents; but when administered to patients suffering contemporaneously under leucorrhœa and diarrhœa it has not appeared to exercise any influence over the former disease, though the latter proved obedient to its action. Its properties appear to me to be very analogous to those of catechu or kino; nor have I discovered that it possesses any conspicuous superiority over either of those two medicinal agents.

"The watery extract of monesia, as prepared by MM. Pelletier and Barthelmy, is of a deep brownish-red colour, very friable, and perfectly soluble in water. Its taste is at first sweet and then astringent, leaving a permanent impression on the fauces. In doses of from five to eight grains, three or four times a day, I have never known it to produce any unpleasant symptom or at all to irritate the stomach. My exhibition of it has been exclusively confined to its internal use, though it is said that in the form of injection it has been found most beneficial in vaginal and uterine diseases."

PREGNANCY, TWO YEARS AFTER CESSATION OF THE MENSES.

At a recent meeting of the "Societé Medicale du Temple" M. Legros narrated the following case:—A married woman, mother of several children, ceased to menstruate at the age of forty-one. Two years afterwards her general health having become disordered she consulted M. Legros. She was then thin, sallow, and presented other symptoms which seemed to indicate a cancerous cachexia. She herself stated that she thought she was pregnant. M. Legros, considering that the menstrual function had been entirely absent for two years, and that its cessation had been accompanied by the symptoms which usually attend its final disappearance, thought he had, in all probability, a cancerous affection of the uterus to deal with, and prescribed an appropriate treatment. He does not appear to have examined the state of the internal organs of generation per vaginam, a most egregious error in such a case, as the neglect of this means of diagnosis, rendered it next to impossible to arrive at a correct opinion of the state of the patient. A few months afterwards the woman was delivered of a full-grown child. She then confessed that on thinking herself safe, she had abandoned herself to a young man. M. Legros suggests that the excitement which attended this new *liaison* may have revived the functional vitality of the uterus, and this seems indeed to be the most rational view of the case.—*Gaz. des Hôp.*, Oct.

THE PRODUCTION OF WAX BY BEES.

In a memoir read before the Academie des Sciences of Paris, on September the 18th, M. Milne Edwards gave, in his own name, and that of M. Dumas, some interesting information respecting the formation of wax by bees, founded on a series of experiments recently performed by MM. Edwards and

Dumas, with great care. The experiments made by these celebrated men are important, as they throw considerable light on the physiology of the animal secretions. The following extracts from the memoir in question, will enable our readers to appreciate the nature of the results which they have obtained.

The production of wax by bees has long fixed the attention of entomologists, and has been already the object of many minute researches. The abundance of waxy matter found on the flowers which bees frequent, naturally led the first observers to think that nature had merely intrusted these industrious insects with the collection and maturation of the materials for the fabrication of their cells, and that they did not themselves secrete it. Such, indeed, was the opinion of Swammerdam and Reaumur, who looked upon the pollen collected by the bees, as wax in a natural state, which they had only to elaborate with some fluid furnished by their organs; saliva, for instance. But the researches of Hunter proved that the province of the bee in the production of wax was by no means so slight as had been previously supposed. This great anatomist demonstrated a number of sacs situated in the abdomen of the bee, from the parietes of which the wax exudes, collecting in the form of small lamellæ. This anatomical fact was confirmed by Huber, but did not suffice for so deep and clear-sighted an observer. Instigated by that spirit of investigation, of which he gave so illustrious an example to entomologists, Huber attempted to discover whether the wax thus secreted by bees pre-exists in their food, and merely passes through the body to accumulate in the abdominal sacs, or whether it is created by these insects from the saccharine matter which they collect in the corolla of flowers. In order to resolve this question, he shut up a swarm of bees in a closed beehive, and only supplied them with honey and sugar. The bees continuing to build wax-cells, he concluded that they had the power of transforming sugar into wax.

The result of this experiment is important not only to entomology but also to general physiology, as it is connected with one of the most elevated questions pertaining to that science,—the theory of animal nutrition. Such, at least, is the view taken of it by the Academy in a recent discussion. The experiments of Huber have been recently repeated by M. Gundlach with the same result, and have been cited by Liebig as furnishing a strong argument in favour of his views respecting nutrition. The conclusions drawn from these experiments were not, however, impregnable, and most chemists admitted them with great hesitation; the more so as it was found, that the food which appeared most calculated to promote the fattening of cattle contained sufficient fatty matter to account for its efficacy, without its being necessary to attribute to the animal the power of producing or creating fat. In order to warrant such conclusions it would have been advisable to have ascertained the quantity of fat pre-existing in the bodies of the bees submitted to the saccharine regimen, to have compared it with the quantity of wax produced, and then to have examined, if, during the course of this experiment, the insects had become thinner; for it is well known that the secretions continue for a certain lapse of time, even if all alimentation be suspended. They are effectuated, under such circumstances, at the expense of the elements pre-existing in the economy, and the fat deposited in various parts of the body is absorbed, and employed as the food would have been had alimentation continued. Neither Huber nor M. Gundlach having taken these circumstances into consideration, it was impossible to say that the wax which these entomologists looked upon as having been formed at the expense of the saccharine matter, had not in reality been previously gathered by the bees from flowers and kept in reserve in the interior of their bodies. It is well known that in the bodies of most larvæ, round the viscera, there collects a considerable quantity of fatty matter, which disappears during the period of total abstinence that precedes the complete metamorphosis.

It is with a view to avoid these sources of error that we have repeated the experiments of Huber, calling to our assistance chemical analysis, and endeavouring in every possible manner to guard against deception. Our first experiment was unfavourable to the opinions of Huber. A swarm of bees collected in a new hive, was placed in a well closed but light closet, and fed with brown sugar. A few days after their captivity had commenced, they began to work and made two small honeycombs; but they soon ceased to labour, apparently incapable of continuing to produce wax, although the quantity they had made was very small. The two honeycombs only weighed 4.284 grammes,* and only gave 3.5 grains of pure wax. The bees who had contributed to its formation were 5615 in number. Each bee had, therefore, only furnished half a milligramme of wax, although a previous analysis of the bodies of a certain number of these insects had shown that the body of each contained about two milligrammes of that substance.

The bees having thus given so small a quantity of wax when fed upon sugar, we determined to try the effect of a more congenial aliment, honey; taking into account, at the same time, the amount of wax con-

* The gramme is about 15 grains; 4 grammes make one drachm, 32 grammes one ounce.

tained in the honey as indicated by previous analysis.

Four swarms were placed in glass hives, and amply provided with honey and water. Three of these swarms produced no wax, although the honey seemed sufficient for their alimentation. The fourth gave more favourable results. This swarm, which only contained 2005 individuals, had made several honeycombs in its former hive. It was removed on the 7th of July, 117 of the number having been previously deducted and killed for chemical analysis. The 117 bees weighed 10.218 gr., giving for the weight of each 0.087 gr. After a very careful analysis they were found to contain 218 milligrammes (0.218 gr.) of fatty matter, or about 0.0018 gr. for each bee.

By applying these data to the 1988 bees remaining in the hive, we shall find that the quantity of fatty matter contained in their structure amounted to 3.218 gr.

The honey which was supplied as food was also analysed, and the 411 grammes which were given to the bees in the first ten days were found to contain 0.329 gr. of fatty matter.

The bees soon began to work, and on the eleventh day of the experiment we withdrew from the hive three honeycombs weighing about 17 grammes, all the cells of which contained eggs and larvæ. The following day the bees were in a state of great agitation and confusion, but did not begin anew to form honeycombs. This, however, was evidently not for want of materials, as a considerable number of lamellæ of wax fell from their abdomen; these were carefully collected, and added to the wax previously obtained. The honeycombs and larvæ, &c., purified and carefully analysed, gave 11.450 gr. of pure wax.

The total weight of the wax divided by the number of bees that had contributed to its formation was therefore 0.0064 gr. for each individual, a quantity much superior to that of the fatty matter pre-existing in the economy of the insects of the commencement of the experiment, and to that contained in the honey they had consumed. But in order to render these results still more correct, it was evidently necessary to ascertain the quantity of fat still existing in the bodies of the bees which had furnished the wax. On the 8th of August the bees had not recommenced their constructions, and a great many had died. Those still alive were destroyed, and found to weigh 13.418 gr., giving for each individual 0.1277 gr., whilst before the experiment the individual weight was 0.087 gr. The bodies of the bees having then been dried and analysed, gave 0.442 gr. of fatty matter, about 0.0042 gr. for each bee.

On comparing these data we find that the quantity of fatty matter produced by the bees during the experiment was much greater than that pre-existing in their bodies, or supplied in their food. Each bee contained in its body before the experiment 0.0018, gr. which, with 0.0004 gr. given in the food, makes a total of 0.0022 gr., the amount of fatty matter supplied from foreign sources.

During the experiment each bee produced wax to the extent of 0.0064 gr., and after it had furnished this abundant secretion each bee contained still in the interior of its body 0.0042 gr.

The production of wax constitutes, therefore, a real animal secretion, and the opinion of the ancient naturalists and of some modern chemists must be rejected. The ideas of Huber, respecting the conversion of sugar into wax are, on the contrary, confirmed, and we consider ourselves happy in being the first to dispel the doubts which prevented the general adoption of the results obtained by him. Now that chemistry is penetrating more and more into the dominion of physiology, it has become necessary for every opinion to be submitted to the analysis of the scales. By their means truth may be separated from error, and we shall gradually learn in which case alimentary substances merely pass into the humours of the economy, and in which they are, on the contrary, modified and transformed under the influence of the organisation.

It is probable that some fatty matters of a special nature, such as cholesterine, owe their origin to modifications like those which produce wax; but this question can only be decided by experience.

In the discussion which followed the reading of this communication, M. Payen stated that the result of these experiments did not agree with the result of others recently made with a view to elucidate this question. Thus, at the farm of M. Boussaingault, pigs fed upon potatoes alone did not fatten, whereas they fattened, on the contrary, when fed with potatoes mixed with butter-milk devoid of cream, which contains four-fifths of fatty matter. To this M. Milne Edwards replied that he did not think these experiments disproved the results at which he and M. Dumas had arrived. He did not, however, conclude from them that in all other animals the fat proceeds from an analogous source sooner than from the absorption of fatty matters existing in the food. The secretion of wax is a phenomenon limited to a small number of insects, and its seat is ina special glandular apparatus bearing no similarity to adipose vesicles. There is resemblance neither in the organs nor in their products; why, therefore, suppose that there must necessarily be identity in their origin? As to the part of fatty aliments in the theory of fattening cattle, he was entirely of the opinion of M. Boussaingault and M. Dumas. Why suppose that the organisation would itself form fat when it receives it already prepared? Why should fat not be absorbed,

and being absorbed, why should nature destroy it in the centre of those tissues which require it? He admitted transformations made by the organisation, but limited transformations, such as that of albumen into fibrine or gelatine. He did not, for instance, believe that the economy could convert fibrine into fat, as Liebig asserts.

COMMINUTED FRACTURE OF THE BASE OF THE SKULL CAUSED BY A FALL ON THE FEET.

ABSENCE OF CEREBRAL SYMPTOMS.

The following case, which occurred in the Hôpital Beaujon, under the care of M. Robert, presents great interest, both as regards the etiology and the diagnosis of fractures of the skull; it is reported in "L'Experience:"—

A quarryman, aged forty, robust, vigorous, fell from a height of thirty-five feet on the 24th of last May. In falling he lighted on his feet, which thus bore the entire shock. The fall was only followed by some slight symptoms of commotion; there was no loss of consciousness, only a little dizziness, and the man returned home on foot. The following day he resumed his avocation. The fourth day he experienced an acute pain in the right ear, but without there being any appearance of pus or blood; at the same time he began to experience continued insomnia. Three weeks afterwards extremely intense cephalalgia supervened, and it was then perceived, for the first time, that the right eye had deviated inwards. The patient having applied for admission at La Pitié, was received into the wards of M. Nonat, who treated, unsuccessfully, the cephalalgia and erratic pains of which he complained, by bleeding, leeches, blisters, and morphia. Not finding relief in the treatment employed, he left La Pitié, but nearly immediately afterwards entered the Hôpital Beaujon, where he was placed under the care of M. Robert.

M. Robert found the state of the patient, on his entrance, such as we have already described. He only experienced continued cephalalgia and erratic pains in different parts of the body. Various preparations of aconitum were administered, but without any result, and the situation of the patient remained the same, without amelioration or aggravation, when suddenly, on the 20th of September, he was seized with violent delirium, and, in spite of copious bleeding and leeches, he died in four and twenty hours, twenty-one days after his entrance into the hospital, and nearly four months after the accident.

At the necropsy the two clinoid apophysi were found separated from one another and from the lamella quadrata. The petrous portion of the right temporal bone presented, near the superior third, an extensive transversal fracture; a considerable fragment was completely separated from the bone. The brain, examined with care, merely presented a slight opacity of the arachnoid membrane, most distinctly marked in the part corresponding to the fracture and to the central and posterior region of the posterior cerebral lobes. The nerve of the sixth pair was torn in the vicinity of the fracture.

In this case a mere fall on the feet, for we cannot suspect the testimony of the patient, sufficed to occasion a comminuted fracture, with separation of a considerable fragment, at the base of the skull, and this fracture, so severe in its nature, was only followed, during four months, by phenomena so slight that it was impossible to ascribe them to their real cause. Indeed, it was never even suspected that a fall on the feet could be attended with a shock so great as to be transmitted through the pelvis and the vertebral column to the temporal and sphenoid bones, and thus to fracture them, without giving rise even to commotion of the spinal cord or brain. It is difficult to understand that so severe a shock should not have been followed by cerebral symptoms. The strabismus is at once explained by the laceration of the sixth nerve.

HOTEL DIEU, PARIS.

PARALYSIS IN THE BRANCHES OF THE FIFTH PAIR ON THE LEFT SIDE OF THE FACE. CURE BY PURGATIVES AND STIMULANTS.

A man, twenty-eight years of age, and usually having good health, had received, three years previously, a blow on the crown of the head, subsequently to which some headach and a difficulty of lowering the brow were experienced, particularly on the left side. In about three weeks a peculiar sensation came on in the left ear, "which the patient compared to the effect produced by the sound of a bellows blowing softly;" the same phenomenon had appeared, for the first time, four or five days after the accident, but now became constant. The patient had never suffered in his power of hearing. On the 23rd of February last he observed the left cheek to be swollen, his mouth drawn aside, and speech somewhat affected, disorders which increased during the next few days. On the 28th the patient could scarcely close the left eye, the sight of which was a little dimmed, and at the same time he remarked both that he had no sense of taste remaining on the left side of the tongue, and that he heard less perfectly with the left ear.

On the 4th of March the man entered the Hôtel Dieu. His mouth then presented considerable deviation to the right side; the left brow could not be lowered, nor the

left eye shut, the orbicular muscle of the lids being wholly paralysed. Common sensation was altogether wanting throughout all the left side of the mouth, except near the commissure of the lips, and over all the left side of the tongue, except slightly at the tip. The sense of taste was also lost throughout the left side, while, however, the tongue moved freely in all directions. The patient could not distinguish vinegar—placed on the left side of the tongue to test its sensibility—from water. A feather introduced into the external meatus of the left ear, was little, if at all, perceived, though it proved highly annoying when placed in the right ear; hearing was proportionally affected on the left side. Similar differences as to sensibility were present between the right and left nostril; in the latter the sense of smell was wholly lost. The tickling of a feather on the right side of the mouth was perceived disagreeably, but not on the left. The conjunctiva oculi was, however, equally sensitive in both eyes, and deglutition was easy, the buccal cavity appearing to be as moist on the left as on the right side. For four or five days the patient had felt, on coughing, a pain over the right parietal protuberance, and over the right eyebrow; in other respects his health was good. Sensibility was intact over all the left side of the neck.

Ten leeches were ordered to each mastoid process, with mustard poultices to the lower extremities, laxative drinks, and low diet. On the 6th the contortion of the mouth was less, and the cephalalgia had decreased. Common sensation had reappeared on the left side of the tongue, at its base, and in a less degree over the left side of the mouth and face. The tears which fell from the left eye upon the cheek were now perceptible to the patient, which had not previously been the case. Continue the laxative drinks. Frictions behind the ears with a volatile liniment, and to take an ounce of castor oil.

On the 7th the left eye could be closed, but no power of taste had returned to the left side of the tongue and palate; pupils in a normal condition, and the patient could now read easily, though previously he had seen only imperfectly on shutting the right eye; hearing better, but the "bellows-sound" continues. Continue the frictions and sinapisms. By the 11th common sensibility was wholly restored; the left eye could be readily closed, and the brow could be moved with little difficulty. The mouth was still turned a little aside, but from this time the case rapidly improved, and the man was soon discharged cured.

CATALEPSY, COMPLICATED WITH HYSTERIA AND EPILEPSY.

A young woman, twenty-three years of age, of a strong constitution, lymphatico-sanguine temperament, and medium corpulence, and who had menstruated from the age of thirteen, five years afterwards undertook a situation as servant at an inn. From that period her health had been deranged, and she suffered from ill digestion, circumstances she attributed to bad treatment which she had received.

In 1838 she had a fit; it began with cephalalgia, followed by swimming in the head, and a dazzling sensation in the eyes. She fell on the ground, not destitute of consciousness, but without the power of uttering a word or executing a single movement. In this state she remained for about half an hour. Eight months afterwards she had a second similar attack, having been subject, during the interval, to cephalalgia, vomitings, meteorism, and swimmings in the head. The catamenia continued, but was irregular and scanty. Fourteen months elapsed between the second and third attacks, and a still longer period between the third and fourth. The fits were most frequent in the months of April and May, when the patient rarely passed a day without one, usually between the hours of five and six in the evening. April 6, 1843, she entered the Hôtel Dieu, under M. Rostan.

On her arrival she complained of sleeplessness, dazzling in the eyes, and tingling (*fourmillement*) in the arms and legs; and when she took food a sensation of choking. At times her abdomen was inflated, and very tender on pressure, but her answers to inquiries concerning her symptoms were very confused, imbecile, and often contradictory. Her physiognomy is said to have possessed a character indicative of hysteria, epilepsy, or some other great nervous disturbance. She was habitually constipated, ate little, and during the first few days of her sojourn in the hospital vomited nearly all the food she had taken. This state was at first attributed to the irregularities of the catamenia, and leeches were applied to the inside of the thighs, but without result. Some days later, the vomitings having become aggravated, and some suspicion of cerebral congestion being entertained, the patient was bled, but little benefit followed. Attempts were made to purge by means of castor oil, but this was rejected immediately after having been swallowed. A blister was applied over the epigastrium, and seemed to have some influence in checking the vomiting, but this having returned a second blister was employed without avail.

The patient's first fit in the hospital took place in about fifteen days after her arrival. It was of a convulsive kind, and was repeated frequently in the course of the next two days. Each of the fits was of short duration and separated from the rest by a lethargic sleep. A considerable interval now supervened before the next fits occurred; meanwhile hiccups and the abdominal inflation and vomitings increased to great frequency. The belladonna which had been employed

during the prevalence of the fits was now replaced by the nitrate of bismuth internally, and blisters to the lower extremities. Under this treatment the vomitings, &c. disappeared, but the fits again increased in frequency till they took place several times daily.

The progress of a fit was as follows:—The patient was commonly advertised of its access by a disturbance of vision and a *sense of quick motion* in the eyeballs. Occasionally it began with headach, pains in the limbs, and some symptoms distinctive of the aura epileptica. A remarkable circumstance was, that if watched, and her attention kept awake by repeated questioning during the presence of these precursory symptoms, the approaching fit was capable of being retarded, though immediately that this excitement failed to be kept up the fit took place. In this there was complete loss of sensibility, intelligence, and voluntary motion. The eyes were closed. The patient appeared just with this notable difference, that a limb placed in any particular position would be maintained so during a much longer period than could be insured by a robust person by any act of the will. This phenomenon was, however, confined to the upper extremities; all attempts failed to develop the same marks of catalepsy in the lower extremities, the trunk, or the head. Neither was the sleep perfectly cataleptic; it was frequently disturbed by yawnings, hiccup, and eructations, during which the abdomen was often inflated, moaning and cries resembling the cackle of a fowl, a flow of frothy saliva, &c., and sometimes the patient would place her hand over her throat as if to remove something producing strangulation, a movement followed by desperate efforts of deglutition. The fit, which might last from ten minutes to three hours, almost always ended in some convulsive movements. Usually these were partial and of an hysterical nature, but sometimes epileptic or tetanic, and involving most of the muscles of the body. The patient came to herself suddenly without any feeling of fatigue, the least disposition to sleep, or any consciousness of what had passed. In the intervals between the attacks, besides the cerebral symptoms before noticed, hiccup, vomiting, a feeling of choking, and other hysteric sensations, were common.

In the course of two months after she entered the hospital the catamenia had become regular, the digestion improved, notwithstanding the continuance of frequent vomitings, and the patient had gained flesh. The mental powers had also brightened, though her memory was still feeble. The patient was still under treatment in July last.

RAYER has sought in vain for a case where *the kidney* can remove absorbed pus from the body.

LONDON HOSPITAL.

AMPUTATION AT THE SHOULDER-JOINT.—MEDULLARY SARCOMA IMPLICATING THE HUMERUS AND THE SOFT PARTS AROUND IT.

JAMES SHADRACK, ætat. eleven years and a half, of lymphatic temperament, admitted under Mr. Scott, July 2nd, with an intractable affection of the right upper extremity, being to all appearance of a malignant character. The arm, elbow-joint, and upper part of the forearm, were greatly enlarged, and irregular on the surface. The integument was tense, shining, and vascular beyond ordinary, of a light purplish tinge, with several distended veins ramifying upon it. The forearm was bent at nearly a right angle to the arm, and this position could not be altered by the efforts of the patient, the functions of the articulation being apparently destroyed. The disease seemed to extend to within a very short distance of the shoulder-joint, a small extent only of the soft parts below the latter being of a healthy aspect. The pain experienced was very acute, and caused much disturbance of the constitution.

He enjoyed very good health up to within ten years of age, at which period the vigour of the system appeared to diminish without any obvious cause. In the early part of December, however, he complained of slight pain in the extremity principally referred to the elbow-joint, which became gradually increased in size, as also the arm and the forearm, the latter assuming, by degrees, a state of permanent flexion. The local abstraction of blood was adopted by his medical attendant, and passive extension of the forearm employed, but without benefit. On further consultation the affected parts were enveloped in mercurial cerate, and a course of tonic and alterative medicine administered to within six months of his admission. These and other remedies proving ineffectual, amputation at the shoulder-joint was recommended, and performed in the following manner:—

A small catling being directed from within outwards, over the anterior part of the head of the humerus, divided the soft parts downwards and forwards, thus forming the upper flap. The articulation was, in the next place, opened, and another sweep of the instrument, downwards and backwards, detached the humerus and defined the lower flap. Necessary ligatures applied without the loss of much blood. The flaps of the wound approximated by sutures, &c.

He passed a good night, without the aid of opium, and on the following morning complained of no pain or uneasiness, the skin being cool, the pulse 86 and soft, and the tongue but slightly furred. The sutures were removed on the fourth day and the ligatures came away on the ninth, the upper

and lower flap being at the time brought into close contact by healthy granulations, freely suppurating. He was ordered to take decoction of bark, three times a day, and was placed on generous diet. On the twenty-second day from that of the operation the wound had perfectly cicatrised; there existed no general irritability, the appetite having returned, and his original state of health having become apparently re-established.

On examining the diseased extremity, the humerus was observed to be broken down in the centre, softened, and highly vascular in the remainder of its extent, to within an inch of the anatomical neck, and surrounded by a mass of fungus hæmatodes, extremely soft and almost pulpy, and mixed up with coagulated blood. This was bounded by true medullary sarcoma, increasing in density the nearer to the surface. The radius and ulna were only implicated in the disease at their upper articular extremities.

AMPUTATION OF THE THIGH. MEDULLARY TUMOUR OCCUPYING THE CENTRE OF THE LIMB.

William Stokes, ætat. 44, of a cachectic diathesis, admitted May 5, with a prominent tumour in the left thigh. It was situated at the inner and posterior part of the middle third, and formed a considerable projection, impinging on the inner surface of the opposite thigh. It was perfectly moveable and unattached to the bone, though the displaced femoral artery (the pulsation of which was evident at the upper and middle parts of its anterior surface) indicated the depth of its origin. The circumference of the right thigh in the middle measured fourteen inches, that of the left twenty-one and a quarter. The left leg was œdematous. Glands in the groin not enlarged.

He states that about twenty-two weeks ago a cask fell on the thigh, about three inches above the knee. From this accident resulted a swelling, which gradually became developed, until it assumed the size and position above remarked. During this period the powers of the constitution became impaired in proportion to the advance of the disease. He had lived but lowly, and the tumour a short time prior to admission had been lanced, giving exit to at least a pint of blood from the aperture. He was immediately placed on generous diet, and a drachm of extract of sarsaparilla prescribed, three times a-day.

On May 11th the double-flap operation was performed at the upper fifth of the thigh. Numerous ligatures were applied, and much blood escaped. The flaps were brought together by sutures, and the stump dressed with strips of common plaster, without compress or bandage. In the evening, being very irritable and restless, three half-drachm doses of laudanum were exhibited at intervals of three hours. He passed a quiet night, and on the following morning the pulse was 110, and very compressible, the skin being hot and the tongue furred. He was ordered six ounces of wine, to be taken during the day, and beef-tea *ad libitum*. He had rallied on the 17th, when the sutures were removed. The wound appeared unhealthy, and from the flabby small granulations flowed a slight quantity of thin pus. The stump was dressed with lint moistened with a very dilute lotion of chloride of lime. Disulphate of quinine, two grains, three times a-day. Ale, wine, and full diet. Healthy suppuration was but slowly established. The ligatures came away on the 27th. The stump had entirely healed on July 13th, and he was discharged on the 3rd of August.

The tumour, which was exposed after the operation, was observed enclosed in an adventitious cyst. It was of an oval form, the small extremity being uppermost. Its vertical diameter was more than six inches, and its transverse measured five inches. On making a longitudinal incision into it, it was found to be composed of medullary sarcoma in its primary stage. The cerebriform substance was intersected with processes of fascia and cellular membrane, and bounded by an irregular circumference of modified and diseased muscle of a cineritious colour. It was highly organised and slightly elastic to the touch.

WESTMINSTER HOSPITAL.

FATAL CASE OF DELIRIUM TREMENS.

John Evans, ætat. 40, was admitted under Dr. Basham on Sept. 30. He was sent to the hospital by the magistrate of Queen-square, as being in a dangerous state of delirium and hardly accountable for his actions. Was lately in a most respectable line of business, but daily and almost perpetual intoxication had exhausted his means, and his treatment of his wife had compelled her to seek the protection of a magistrate. He is a robust man; high-coloured flushed cheeks; eyes glassy and suffused, pupils contracted, lids congested, and the tarsi glued with a thick sebaceous discharge. He lies in a state of low muttering delirium, capable of being partially roused to answer the questions put to him; tremors of the upper extremities; skin hot, but inclined to perspiration; tongue furred, brown, chapped, and dry; abdomen tumid and tympanitic; passes his water freely; bowels open from medicines previously administered; pulse 130, compressible; heart's action irregular in force. To have a turpentine and castor oil enema directly, which is to be repeated if necessary. To take two grains of calomel and half a grain of opium every four hours, and also a draught of the acetate of am-

monia, with five grains of the sesquicarbonate of ammonia and peppermint-water, and a blister to the neck.

Oct. 1. From the period of admission no alteration of the symptoms took place, except a copious discharge of flatus and knotted fæces, with glairy mucus, after the enema. The pupils had continued contracted from the first notice of the case, but about three, p.m., they were observed to become suddenly dilated; the tremors subsided; the muttering delirium and flushed face gave place to frequent suspirations and a cadaverous pallor; he rapidly sank and died an hour and a half after this change came over him.

Examination Forty-eight Hours after Death.—Meninges of the brain natural in appearance, but there was a remarkable and very considerable effusion of serum between the pia mater and arachnoid, to such an extent as to distend the serous membrane into prominent elevations. The ventricles contained much fluid, as also the investing serous sheath of the medulla oblongata and spinal cord. The cortical portion of the cerebral substance was deficient in colour, having a pale sodden appearance in the place of the greyish hue of the healthy state. The nerves and white matter of the brain had no morbid appearance. Other viscera healthy. The brain had a remarkably characteristic odour, often noticed in similar cases.

Remarks.—Dr. Basham directed the attention of the students to this case and wished them to contrast it with that of George Wright, noticed a short time since. The disease in both cases was delirium tremens; the symptoms, all the essential diagnostic symptoms, were similar, differing only in degree. The peculiar features of this case were those which suggested an unfavourable prognosis. The most prominent of these were the rapid pulse (130) and low state of the cerebral functions. A pulse varying from 70 to 90, combined with active violent delirium, with hallucinations, would always afford a more favourable prognosis than when the circulation was rapid and the sensorial functions were low, as was often exemplified in the latter stages of typhoid fever, where a similar condition existed, low muttering delirium with a feeble quick pulse. This case illustrated, also, the necessity for relieving the bowels by enemata, the copious discharges of flatus and the character of the evacuations being exactly similar to that alluded to in the case of George Wright. The sudden dilatation of the pupils corresponding to a sudden collapse of all the powers of life, Dr. Basham conceived might indicate the rapid increase of the serous effusion in the cerebral cavity to an extent that suddenly deprived the cerebro-spinal system of the trifling amount of vital energy that remained in it up to that instant of time.

CASE OF INTERMITTENT FEVER "CUT SHORT" BY AN EMETIC.

Robert Hall, ætat. 14, admitted under Dr. Basham, Oct. 5th. The lad is employed on board one of the river steamers; complains of rigors, which have occurred each alternate day in the morning for the last eight days; these rigors are distinctly-marked paroxysms of intermittent, occupying about six to eight hours in their duration, the cold fit usually coming on about nine, a.m., the hot stage about eleven a.m.; this is succeeded by a copious perspiration about two, p.m., and an hour or two afterwards he feels comparatively well; the tongue is furred; pulse 120, soft; skin hot; no epigastric tenderness; urine high-coloured and sedimentitious; bowels irregular; sleeps on board the steamer, generally either with the scuttle or companion open. Is a native of Kent, near Faversham, and three years since had ague, which lasted three months. To take an emetic directly.

Five, p.m. The emetic operated well; much bilious fluid vomited. As soon as the stomach became quiet he broke out into a copious perspiration, with inclination to sleep. When he awakes to take three grains of calomel with eight of jalap.

Oct. 6. Passed a very comfortable night; powder operated briskly; no paroxysm of ague this morning; tongue clean; skin somewhat high in temperature; pulse 90, full and soft; complains of thirst; bowels not open to-day; urine scanty. To take a purgative draught, and every four hours a diaphoretic, with fifteen drops of the sweet spirit of nitre and camphor julep.

7. This morning has passed without any symptoms of ague; appetite returning, craving; bowels open; thirst diminished; slept well; skin natural; pulse 80, soft.

12. The lad is perfectly convalescent; no symptom of intermittent has appeared since the operation of the emetic; he is on full diet, and will go out on Tuesday.

Dr. Basham observed that this case illustrated well the influence of an emetic in cutting short the paroxysms of intermittent fever. There were certain indications that always suggested the propriety of unloading the stomach by a free vomit in ague, and unless these be present we should not be justified in expecting the certain relief so palpably obtained in this case. These indications might be briefly stated to comprise a white loaded tongue and the absence of epigastric tenderness; the latter should always be specially noticed, for its presence contra-indicated the exhibition of emetics, it was symptomatic of gastric inflammation, and the operation of such a remedy would thus only tend to increase the evil. So completely had the emetic destroyed the catenation of the symptoms in this case—so effectually had it arrested all traces of fever—that the exhibition either of anti-periodic

medicines or of tonics was unnecessary. On the third day there was slight heat of skin with thirst, the urine was scanty and the bowels irregular; but a purgative draught, with a mild cooling diaphoretic, had removed these symptoms also, and the lad was, without any other restorative than a good appetite and a judicious diet, returning rapidly to his former strength.

DREADNOUGHT HOSPITAL SHIP, RIVER THAMES.

SCROFULA. AMPUTATION OF THE LEG.

J. Bryant, taken on board on December 18, 1841, for scrofula. On the 23rd of June, 1842, his leg was amputated one-third above the knee. Incision through the muscles performed by repeated cuts, so as to make an irregular division down to the bone. Periosteum divided and flesh retracted by a split bandage. Bone sawn, leaving a splinter; an artery or two tied; afterwards the tourniquet, which had been fixed on a pad of lint, rolled, two inches long and one wide, loosened. Nine arteries tied, femoral with a thicker ligature. Two or three sutures, then a piece of strapping, two feet long, carried across the middle, from the tuberosity of the ischium to the spinous process of the ilium. The sutures were immediately after cut, and the strapping removed, on account of hæmorrhage, which it was discovered proceeded from the bone. It was touched with a stick of nitrate of silver, and a bit of lint, the size of a shilling, applied with a string attached. The wound was cleaned of coagula, and strapped afresh, with three or four pieces, leaving the corners open. A roller was applied, commencing round the hip, and carried to within an inch or two of the wound. No strapping circularly. Nine ligatures left, divided in two lots, and kept in place by the strapping, which brought the edges of the wound together,—the whole enveloped in a piece of wet linen, pinned. A wet piece was laid over this, and he was then conveyed to bed in a man's arms, the stump being supported by another. The limb was laid on a pillow prepared for it, covered with oil-cloth. He took a dose of morphia. The limb, according to report, was not convulsed the whole night.

24. Stump left untouched; bandage, which was kept constantly wet, merely stained. Coagulum suspected in the middle from the feel.

27. Strapping removed by cutting it away, soaking it, and gently pulling; fresh strapping applied across the wound; over this lint spread with spermaceti ointment, and over this a bandage, loosely applied, with reversing. Takes a quarter of a grain of morphia every night, and two ounces of sherry daily.

28. Complains of looseness; port wine given; bandage removed; fresh lint applied; pulse 112.

29. Looseness continued. Chalk mixture. Wound united at the edges; very slight pressure over the limb; no excess of integuments or flesh; dressed as before; discharge slight.

30. The bit of lint brought away; a hole in the middle of the wound, the rest united; granulations pale-looking; purulent matter discharged from the opening; a ligature brought away; dressed as before; stump appearing too much nursed, seeming to require more pressure, and a firmer hand; looseness continues.

July 7. Has been dressed without strapping for some time. A bandage carried round the pelvis, and brought by successive folds down to the end of the stump. A pasteboard splint applied on the inside. A ligature brought away on the 5th.

13. The two remaining ligatures came away to-day; little or no discharge; a small hole in the middle where the lint came away; leg bandaged from the hip. One broad piece of strapping applied round the middle of the stump, then some double folds of lint, afterwards some linen, and the bandage carried over all. The ligatures had been loosened by being kept on the stretch. Allowed to sit up.

15. Put his trowsers on, and was carried on deck. Some cotton put round the stump in a piece of linen, and fastened on with a small bandage.

THE NINTH PAIR, NERVES OF SENSATION.

PANIZZA says, "I am convinced (from certain experiments performed on dogs) that the hypoglossal (ninth) nerve is endued with sensation, but with this qualification, that in some dogs the function is very feeble, while in others it is very decided. In others, again, the ninth pair seems to possess no share of sensibility. Anatomical examination in these several instances serves to explain the difference. In some dogs the hypoglossal nerve, at its emergence from the cranium, communicates immediately not only with the first, but also with the second and third cervical nerves; in other instances it communicates with the first cervical pair only; the communicating branches are sometimes large, at other times minute. It is thus rendered clear that the power of sensation sometimes possessed by the ninth nerve is not inherently *its own*, but is due to the branches of the spinal nerves connected with it, and is in relation with the extent and magnitude of these."—*Panizza, in L'Experience.*

THE LANCET.

London, Saturday, October 28, 1843.

THE MONSTER CHARTER of the COLLEGE OF SURGEONS in Lincoln's-inn-fields was submitted to the view of the medical profession of this empire in the last number of THE LANCET. The council are allowed by it three months for preparing their first batch of Fellows, and twelve months for adding to that number, by nomination. Thus they have time granted them for some consideration in taking the first steps in the new history of their nefarious practices. *We*, also, shall take some time to consider what is best to be done under the new circumstances in which the members of the College are now placed; but no time is necessary to enable us to describe the character of the new production, and without hesitation we declare our belief that a more mischievous, a more iniquitous, charter never was honoured with the sign manual of the Crown. This we will by-and-by prove, strongly suspecting, at present, that we shall find little difficulty in establishing the fact that it was obtained from the Executive Government—as was the charter of 1800,—by MISREPRESENTATION and FRAUD.

OUR statements last week, at page 91, respecting the organisation of the Parisian hospitals, must have convinced our readers how completely dependant the physicians and surgeons of those institutions are on the will and pleasure of a *non-medical* board,—the board by which the hospitals are governed. Owing to that dependance, individually, the influence of the medical officers over the government of the charitable institutions, of which they ought to be the principal managers, is null, or, at most, is merely based on the weight and consideration which their position *in society*, or other extraneous circumstances, may give them. As a body they might certainly exercise great control over the governing board, were they to coalesce, and to present a bold front to the authority under which they now tremble, as they have recently done in the case of MM. GUERIN and LEROY D'ETIOLLES; but all who are acquainted with the social history of our profession, from the days of HIPPOCRATES downwards, well know how rarely its members preserve sufficient friendly feeling amongst themselves to enable them to direct their efforts, for any length of time, towards a common object. The faculty of *Paris* presents no exception to this peculiarity. Indeed, the proverbial jealousy of medical men may be said to be more marked in that city than in most others, owing, probably, to the regimen under which they live. All the prominent medical and surgical positions,—the appointments in the hospitals, the professorships of the Faculty of Medicine, &c. &c.,—are gained there by honours; and as the positions thus claimed by the successful competitors almost invariably give them, also, the lead in private practice in Paris, we may safely say that nearly all the first medical men in Paris owe their eminence to that institution. The concours, on the other hand, leaves the light of no man who submits to it under the bushel. It seldom occurs that an appointment, whatever its nature, is obtained on the first trial. Generally, several ordeals have been gone through before the desired position is acquired, and those ordeals, by bringing the candidates repeatedly before the medical public, soon make every one fully acquainted with the merits and scientific claims of the competitors, which are carefully and jealously scanned by their opponents. Thence arise feelings of rivalry, and sometimes of ill-will, which often extend through after-life, although concealed under an apparent cordiality of manner. This, however, is but a slight drawback on the system of concours, albeit much magnified by its enemies.

The medical functionaries of the Paris hospitals have, however, one means of exercising a kind of censorship over the pro-

ceedings of the non-medical board. Every year a "medical commission," selected from their number, is named, to investigate into the state of the various hospitals, their wants and deficiencies, with directions to report thereon to the board. The duties of this commission are generally conscientiously performed, and in most years a sad list of imperfections in the hospitals is presented to the governing body. As, however, the latter is not bound to act on the advice of the commissioners, the board generally returns merely a polite answer to the report, and there the matter rests. Sometimes the commission has the courage to allude to subjects which have not any direct reference to the diet, &c., of the hospital patients, to the great horror of the aristocratic non-medical board, which forthwith haughtily announces its displeasure. Such has been the case this year. The annual commission named in the last summer was composed of men who fully comprehended the extent of the responsibility that was imposed upon them, and who, after a searching investigation, addressed a lengthened report to the board, in which numerous deficiencies in the diet, the warming, the clothing, the bedding, the pharmaceutical department, the buildings, &c., of the various hospitals were pointed out, and remedies for the wants were urgently pressed. Nor did the commission there rest its suggestions; considering that the medical necessities of the patients imperatively demanded that the governing body should benefit by the experience of medical men, to whom those wants are best known, the commissioners, in their own name, and those of their colleagues, respectfully requested that a certain number of medical men,—surgeons and physicians to the hospitals,—should be admitted to the meetings of the board, and allowed to take part in its discussions. This report was printed, as usual, and distributed to the hospital physicians and surgeons; but, although very moderate and respectful in tone, and most rational in substance, it at once excited high indignation of the board, and a committee of three members of that body, named to examine the report, and reply to it, have just made known their answer. They first complain of the length of the commissioners' report, which, they say, is much greater than the case warrants. They then proceed to condemn the revelations which the commission have made respecting the state of the hospitals, "revelations which "are calculated to impress unfavourably "the public mind respecting the hospitals, "especially coming from persons who are "entrusted with the treatment of the sick;" thus forgetting that the report was addressed not to the public, but to the board, and that if it contains any disagreeable sentences which come before the general public, the exposure is the fault of the board, which ought to have conformed to the advice of previous commissions, or to have modified any existing abuses of its own accord, the more so as it professes to be able to do without the suggestions of its medical "subordinates." The board committee also loudly complains that the medical commissioners, not only in this report, but in anterior documents of the same kind, meddle with "the internal administration of the "hospitals, with which, nevertheless, they "have nothing to do;" adding, that the commissioners ought to confine themselves to purely medical questions. With reference to the modest demand of admission to the meetings of the board,—so rationally made by the commissioners,—the governing body, through its committee, declares "that it "sees neither utility nor propriety in the "admission into its bosom of persons whom "it would feel honoured to number, individually, among its members, but whose "presence at the discussions of a body to "which they do not belong would be attended with no advantage. Besides," add the committee, "hierarchy cannot "disappear, and it would be improper for "discussions to take place between persons "whose positions in the administration are "not the same." In other words, this non-medical board thinks it the height of imper-

tinence that the hospital surgeons and physicians should presume even humbly to hint at being allowed to assist at its meetings, and take a part in its discussions on medical subjects, notwithstanding that the information of mere lawyers, merchants, and other "gentlemen" who have received no education in medicine, must be so inferior to that of the professional men whom they treat thus degradingly. But, forsooth, "hierarchy must be preserved."

Singularly enough, although the board thus yearly reproaches the medical commission with its interference, and recals to its members a sense of their personal dependance, yet all the ameliorations which are to be made in the ensuing year, as well as those which have been previously made in the hospitals of Paris, are merely fulfilments of suggestions that have proceeded from the much contemned commission. Indeed, to any one who is acquainted with the internal working of those hospitals, it is evident that were it not for the salutary spurnings of the annual commission, the administration would sink into an apathy most injurious both to science and the inhabitants of the medical charities. Nor could we anticipate anything else from a body whose members, without knowing anything of science, however sincere their benevolence, are entrusted with the government of medical institutions. To illustrate this retrograde tendency of the Parisian board we may mention a circumstance which occurred in 1840, when the board, in conformity—as was generally supposed—with the theological prejudices of one or two members, issued a decree ordaining that from that time forward no autopsy should take place in any hospital unless with the consent of the parents, who were to be written to, immediately after the death of their relative, to that effect. This decree was enforced for a week or two, despite the energetic opposition of the surgeons and physicians, who vainly urged that such a measure would completely arrest the progress of science, by stopping pathological researches, as it would be vain to think of obtaining the consent of parents to autopsies if they were allowed to refuse them. Whether this ordinance was wise and considerate, or not, the effect foretold by the medical officers ensued. Nearly a complete cessation of all pathological investigations for a time followed,—in the land of Laennec and Cruveilhier! It is scarcely possible to pronounce what would have been the result, with reference to the cultivation of medical science in Paris, had a continuance of this law been enforced. A member of the Government promptly destroyed this rule, which neither the Dean of the Faculty in the board, nor the representations and entreaties of medical men without, could annihilate.

When any new decree is made by the board for the government of the hospitals, it has to be countersigned by the Minister of Public Instruction. This regulation can scarcely, in general, be regarded as a check on the decisions of the board, as the minister's signature is usually given as a matter of course. In this instance, however, M. Villemain, who held the above office, had heard of the innovation, either from public report or from some medical friend, and indicated his opinion of its influence by tearing the decree and reprimanding the board, to the great joy of the hospital physicians and surgeons. On M. Orfila, the Dean, dividing the board on this question, when discussed, he is said to have been alone among his sixteen colleagues.

Many of our readers may be surprised to learn how low is the real position of the physicians and surgeons of the Paris hospital in the scale of hospital "hierarchy;" but their condition only supplies another instance of the results of that professional disunion which characterises the medical body in our own country. It seems as if the followers of Esculapius were nearly all negatively electrified, and constantly repelling each other; yet how great might be their influence, for good purposes, if united for a firm assertion of their rights, may be judged by the example of the Paris hospital commission, which, although composed of only half a dozen members, has this year, by its determined attitude, compelled the board to adopt all its suggestions, however ungraciously at first received.

The paper recently read at the Academie des Sciences on the formation of wax by bees, and translated into the present number of The Lancet, p. 116, is important as having reference to the views of Liebig on the physiology of animal nutrition, and will be read with much interest in this country.

A Pathological and Philosophical Essay on Hereditary Diseases. With an Appendix on Intermarriage, and the Inheritance of the Tendency to Moral Depravities and Crimes. By JULIUS HENRY STEINAU, M.D., of the Royal Medical College, Berlin. London: Simpkin and Marshall, 1843. 8vo, pp. 52.

THIS essay was, for the most part, originally published in Germany. The author now resides in London, and has translated it for circulation in England, with a dedication to Dr. Hodgkin. It manifests a considerable amount of research into the writings of continental physicians, whose opinions on various points are here given in systematic order, with a general expression of the views of Dr. Steinau on the questions raised. He cites the very ancient belief that diseases are hereditary; distinguishes such diseases from others which are only "innate" (characteristic of the individual, yet neither derived from the parent nor transmissible to offspring); discusses the question of disease acquired through the breast-milk; mentions the intervals in generations which may elapse before the re-appearance of an hereditary disease; inquires whether the disease of the father or that of the mother is most likely to appear in the infant; announces that children are not necessarily born sick because the parents are afflicted; adverts to the transmission of diseases amongst the lower animals; debates the inheritance of deformities and other local peculiarities and malformations; speculates on the operation of the maternal mind on the fœtus; names the diseases which appear, not at *any* age, but generally at one particular period of life. And so on. As these matters are all comprised within thirty-six pages, it may be readily judged that the work rather presents a catalogue of the subjects to be discussed than a weighty debate thereon. The rest contains some remarks on the questions broached in the "Appendix" mentioned in the title. So very little has been published on the subject of hereditary diseases, in a collected form, that those who feel specially interested with regard to them will willingly add a new production on the subject to their libraries. We quote a few passages at random:—

Unsuspected Cause of Disease.—"Jos. Adams justly separates from the hereditary diseases family diseases, which are neither inherited from the parents, who were free from them, nor are communicated, farther, to their own children. These diseases are often occasioned by a bad regimen, more or less easily to be discovered, to which the children were subjected in their earliest infancy, and are thus caused by noxious influences to which they were all equally exposed. The late celebrated physician Heim, in Berlin, mentions a case which came under his notice in the course of his practice, in which the children of the same mother always died of trismus neonatorum a few days after their birth, till he succeeded in tracing out the cause, which consisted merely in the position of the cradle between the door and the window, by which arrangement the children had constantly been exposed to a current of air. At the fourth delivery of the mother, the cradle having been removed to another place, the child remained unattacked by this dreadful evil."

Disease from the Milk.—"Gaubius and Portal place among the hereditary diseases those which children acquire by the milk of their mother or nurse, whilst other authors do not consider such as hereditary. It is, however, a question whether it be proved by experience that diseases, exclusively reckoned among the hereditary, are communicated to children through the medium of the milk, and especially that of a nurse. Neither our own experience nor the records of former writers furnish us with examples sufficiently clear to prove this opinion, whilst many celebrated authors maintain the contrary. Hom and Kluge set it down as a fact that the milk of syphilitic women is not syphilitic; but Delisle effected the cure of a syphilitic child by having it suckled by a she-goat which had daily one drachm of ung. hydr. rubbed in till it caused salivation. These two facts, of which the latter appears in some measure to contradict the former, especially when we consider the similarity between a mercurial and syphilitic dyscrasy, together with many other reasons, furnish much occasion for inquiry."

How Diseases become Hereditary.—"The most contrary opinions have been given by pathologists as to the question why and how it is that anomalies and diseases with which parents are affected show themselves in their offspring, and are often propagated through whole generations. Suffice it to say, that most of the ancient pathologists founded their opinion upon the well-known words of Hippocrates, 'Semen genitale ab omnibus corporis partibus procedit, a sanis sanum, a morbosis morbosum.' They took it for granted that the sperma of persons suffering under a particular disease is itself in a morbid condition, and that thus diseases are transferred to children at the moment of generation. Many celebrated pathologists of recent times maintain that till the physiology of the act of generation, as well as that of the first formation of the embryo, are more rightly understood than at present, no

correct opinion can be formed of the first causes of hereditary diseases. Portal, who perhaps of all writers of the present century has treated the subject of hereditary diseases the most largely, says that there is in physics, and especially in medicine, a number of well-known facts for which no satisfactory reason can be adduced, and these are among them; and he consoles himself with saying that he well knows the nature of hereditary diseases, though the causes by which they are communicated remain a secret to him. All that we at present are able to conclude, if we must in some degree explain these phenomena, is that on the part of the father the cause rests upon a morbid, *i. e.*, an anomalous condition of the sperma, even though it be only a dynamic alteration or modification of it. On the part of the mother the communication of hereditary disease can be effected in different ways:—Primarily, in the same way as from the father, at conception. Secondly, at a later period, during the process of the formation of the embryo, after the ovulum is descended into the uterus. Here, again, the communication can be effected in three ways: 1st, through the blood; 2dly, through the agency of the nervous system; and 3dly, through other connections, which exist between the mother and the fœtus, and which, though not yet found out, cannot be entirely denied. That diseases can be transferred from the mother to the child through the blood as well as through the nerves, though even the most sharp-sighted anatomists have not yet been able to lay bare, by means of the knife, any connecting blood-vessels and nerves between mother and child, is an opinion to which men like Hufeland and Carus give their support."

Hereditary Deformities and Diseases.—"We cite the following cases only on account of their being so remarkable:—1. Mauricean relates a case of a *lame* man having had three sons who were *all lame*. 2. Borelli tells us of a well-made man who was three times married, and whose *father* had been lame: the children of this man by his three wives were all lame. 3. The celebrated Lorry relates the following remarkable fact:—A general had been hit in a battle by a ball on the collar-bone, the middle of which was taken out, and the remaining portions grew to the soft parts surrounding them, leaving an empty space. His wife afterwards bore him a daughter who had the same defect in the collar-bone. 4. In Blumenbach's 'Medical Library' we find the following:—An officer had been wounded in the little finger of his right hand, in consequence of which this finger for ever remained deformed. He afterwards married, and all his children, male and female, were born with the like deformity in the same finger on the same hand. 5. The following remarkable case is noticed by Gaubius:—The little finger of a man began, from some cause or other, to grow inwardly, and became quite bent towards the palm of his hand. The eldest of his two sons, when at the age at which his father became affected with the deformity, observed that his little finger began to bend towards the palm: different remedies were applied, but in vain. The second brother, fearing the same fate, began, long before the fatal period, to use all possible preventive means, but without effect. At the said period his little finger became bent, like that of his father and brother. Dr. Little, who successfully presides at the Orthopædic Institution in London, often observes the most remarkable instances of hereditary deformities in that institution. All the members of a family have been attacked by icterus at the same age, and an especially remarkable case is described by Boerhaave. Speaking of hereditary dropsy, Rougemont, supported by the testimony of several credible writers, says that it is proved by numerous observations that the children of such parents as have died of dropsy become at a certain age also dropsical. Many cases have been noticed of dropsical women being delivered of dropsical children, particularly one case quoted by Hufeland and observed by Olivier. Hereditary hæmorrhoïdes and gout are of frequent occurrence. The same may be said of lithiasis; but still the following case, mentioned by F. Hoffmann, is worthy of notice:—The lady of the Prince Moritz, of Zeitz, was afflicted with nephritis: she was delivered of a daughter, who, from the moment of her birth, suffered very great pains, especially when passing water. The child lived only three weeks. At the post-mortem examination there was found in the bladder a stone as large as the stone of a peach. Gaubius assisted at a lithotomy performed on a boy of ten years of age, whose father had, twenty-five years before, undergone the same operation. The father, upon seeing the stone taken from his son, assured them that it was quite like that taken from himself. Gaubius compared them, and found they were indeed like each other in every respect, excepting in size, the father's being somewhat larger than that of his son. Stahl also assures us that he never saw a person suffer from lithiasis whose father or some other near relation had not been afflicted with this same complaint or with gout."

Breeding in-and-in.—"There is a peculiar breed of cattle which is supposed to have existed in Northumberland for upwards of a thousand years, which maintains its characteristics unchanged, and is remarkable for vigour and beauty. The whole herd is kept within restricted limits as to number and space; and when the well-known habits of these animals are considered, there can be no doubt that the closest breeding has been

in continual operation. There are several districts in Europe in which striking physical characteristics are so distinctly marked that it is impossible not to infer that the race has been kept up by a long series of intermarriages, without any indication of disease or degeneration. This is said to be particularly the case at Newhaven near Leith; the inhabitants of which place have, from time immemorial, been scrupulously select in their marriages, and are no less remarkable for their superiority in figure, and their great exemption from consumption and scrofula, forming a striking contrast with the neighbouring population. Other fishing-towns and villages of Scotland, though of much smaller size, appear to resemble Leith in these particulars. In one of these places inquiry has been instituted by a gentleman residing in the neighbourhood, and he ascertained that one quarter of the marriages were between first cousins, but that no prejudice existed against these connections, and that no failure in the number or physical characters of the offspring had been noticed."

PAST AND FUTURE EXAMINATIONS IN BOTANY AT THE UNIVERSITY OF LONDON.

To the Editor of THE LANCET.

SIR,—Mr. Eyre must excuse my having mistaken his first letter (page 808) for the pettish expression of a disappointed candidate; for when a writer conceals himself behind an anonymous signature we are seldom inclined to consider his statements worthy much attention. I should not have noticed his communication at all if I had not been desirous, at the same time, of removing the erroneous impression—which some of the examiners informed me was entertained by the medical students—that they need not pay any attention to the subject of botany. Since Mr. E. has very properly apologised for his unguarded statement of my having neglected a very important part of the duty of an examiner, that of comparing notes with the other examiners, I will notice what he has said (page 948) about my having neglected what forms no very essential part of my duty, the attending in the examination room whilst the candidates write out their answers to the questions set them. The senate have determined that if any examiner should be prevented attending, his place may be supplied by the registrar. The chief use in an examiner's being present when no *viva voce* examination takes place is to prevent certain candidates, not properly imbued with generous feelings or moral principles, from copying their answers from such of their neighbours as may happen to possess that information which they themselves have *neglected* to acquire. It was not my intention, on the occasion alluded to by Mr. E., to have imposed this task upon the registrar; but, unfortunately, I had very unexpectedly received a summons, only two days before the examination, to attend the Ipswich Assizes, where it was thought my evidence would be necessary in a case of some importance. This circumstance alone was the cause of my being absent.

I need not notice any of the other personalities and singular inferences of Mr. E., but will proceed to make a few comments upon the character which I have considered it advisable that the examination in systematic and physiological botany should assume. Mr. E. has objected to a question which referred to the structure and economy of the genus *cuscuta*, as being of no importance to medical practitioners. I am no more directed to examine in medical botany than is the classical examiner to frame his questions with regard to the writings of Hippocrates. But I should have thought the most careless and incurious student of structural and physiological botany would have had his attention arrested by the singularly anomalous structure of the embryo of cuscutæ, so especially alluded to and figured in "Lindley's Introduction," a work in the hands of most students. I also should have thought that he would have been struck by the remarkable manner in which those parasitic plants obtain their nourishment. The history of this genus is intimately connected with the general theory of nutrition of vegetables, and is constantly referred to by writers on physiological botany. Mr. E. says that I "allowed that I had framed my questions with a view to *systematic* botany, which was a thing that I certainly had no right to do." He has mistaken my meaning. The questions to which I alluded refer *very partially* to systematic botany; in fact, no further than to the naming a genus or family, in which I ask for examples of some particular structures. Thus, also, among the questions proposed by the examiners in animal physiology and comparative anatomy, I find that those gentlemen have availed themselves of a similar licence, as, for instance, in the following questions:—

"Give a general account of the organs and the course of circulation in the annelida, and describe particularly those of the lumbricus terrestris."

"Describe the organs of digestion and nutrition in animals belonging to the family of medusæ, particularly rhizostoma, equorea, eudora, and beroe."

"Describe the shell of an echinus, and its mode of growth."

Such questions as these bear just as much relation to systematic zoology, as the two

following, objected to by Mr. E., bear to systematic botany:—

"What is the nature of vegetable albumen? Is it found in the seeds of ranunculus, pisum, sinapis, primula, and geranium?"

"What is a stipule? Are the plants in rosaceæ, leguminosæ, cruciferæ, generally stipulate or not?"

Such very *partial* references to system as the allusion to a genus or family in which some particular structure may or may not prevail, is surely a very different thing from asking for the diagnostic characters by which any particular group is defined. In all *pass* examinations these references to particular groups have been limited to some of the commonest of our cultivated or most prominent among our British plants, chiefly from such as are selected in Lindley's "School Botany," another work which is, I believe, in the hands of most students preparing for these examinations. Candidates should understand that although they may be unable to answer some of these questions entirely or fully, yet, that they always obtain credit, and a certain number of marks, for so much of each of them as they can reply to. The examiners have never considered botany of first-rate importance, and, therefore, no one has ever been rejected who has shown us that he had paid a moderate degree of attention to that subject. Until the last examination I scarcely remember any candidate having been rejected for his botany alone. We have generally remarked of candidates who fail, that they do so in more than one subject. Hitherto I have ever had occasion to speak in praise of the very creditable manner in which many, and the very admirable manner in which several, have acquitted themselves; but I must confess that I was rather taken by surprise, at the last examination of the medical students, on finding how many had *almost*, and even some who had *entirely*, neglected their botany.

Having explained myself for the sake of any future candidates who may have been made unnecessarily apprehensive of what is required of them in this examination, I will venture to assure them all that three or four months' study, provided they will really work at the subject, and not content themselves with merely skimming over the pages of the works I have noticed, will be found quite sufficient to qualify them for a pass examination. To prepare for an examination for honours they must take a somewhat wider range. Various occupations have prevented my replying earlier to Mr. Eyre's letter, which, I see, appeared in your number for 30th September. Your obedient servant,

J. S. Henslow.

Hitcham, Suffolk, Oct. 20, 1843.

WESTMINSTER MEDICAL SOCIETY.

Saturday, October 21, 1843.

CASTRATION FOR NEURALGIA.

The society held its first meeting for the session this evening, at its old rooms, 32, Sackville-street. There was a tolerable attendance. The early part of the evening was occupied by the nomination of members to fill up the vacant offices.

A man was presented to the notice of the society who had suffered castration for neuralgic pains in the testicles, and of whom the following particulars were related by Dr. Chowne:—

R. M., aged 33, of short stature, dark hair, and slight form, had been long the subject of irritable testis, and had also varicose veins in the spermatic cord of one side. In 1839 the varicose veins were tied by the late Sir Astley Cooper. The testis remained irritable, and extremely painful at all times: he considered that the pain and other consequences of the irritable condition of the testis occasioned bad rest at night, and very great bodily weakness and great mental depression; both his mind and body were harassed, and he resolved on requesting that the painful organ might be removed.

Treatment was adopted in order to allay his pain and to diminish his anxiety on the subject, but nothing having proved useful to him he was still desirous of undergoing the operation, and the testis was removed in August, 1841.

For some time after the operation he remained in all respects better; slept better, fewer weakening circumstances occurred, and he supposed that he was wholly freed from the distress to which he had previously been subject. This promising state of affairs, however, was but temporary, and the remaining testicle became as troublesome as the other had been.

In this state he made an application at Charing-cross Hospital to have the remaining testis removed, but after a full inquiry into the circumstances it was not deemed desirable to comply with his request, and for some time he was lost sight of. Dr. Chowne had reason to believe that he applied to other public institutions. When next he saw him, a few months since, he applied as an out-patient at the hospital, complaining of pain in the bladder, and other symptoms connected with the urinary system.

In the interim the second testis had been removed; the operation was performed in October, 1842, and he soon recovered from it. For some time he again remained pretty well, had no suffering, and did not at first discover that he was weaker. He was soon attacked, however, with pain in the back and loins, pain at the neck of the bladder, frequent micturition, accompanied by pain.

He is now free from the circumstances to which, before the operation, he attributed his weakness; but he is even sooner fatigued and exhausted by exercise than he was before the operations. Any kind of work soon overcomes him. His loins are the parts to which he refers, as being in the greatest pain. His spirits are not good, and his thoughts dwell very much upon his illness. He does not express regret at having undergone the operations otherwise than that he does not consider himself so free from complaints as he expected to be. His voice continues quite masculine; he shaves as frequently as usual, and does not consider that the occasion for shaving is diminished. His mammæ have not undergone any change, and his limbs retain their form. It appears extremely probable that much of his pain, prior to the operations, was the result of his own apprehensions, and of a morbid state of the mind; but this, although arrived at a great extent, Dr. Chowne could scarcely consider as monomania. There is no reason to doubt that he had pain, and his inference that removal of the parts would relieve him was not irrational. There do not at present exist reasons for supposing that his bladder is seriously affected; and it is extremely likely that if this malady were removed he would not be long without some other cause of anxiety.

Some discussion followed respecting the propriety of the removal of both of the testicles in this case. Dr. Reid recollected a case in which a maniac had torn off one of his testicles, and a member referred to the case mentioned in Mr. Liston's lectures, of a youth who was most desirous of being castrated, and actually attempted the operation himself.

Dr. Chowne made some remarks relative to a preparation of

UTERINE HYDATIDS,

which he exhibited. He said it very seldom happened that we had an opportunity of seeing uterine hydatids (so called by authors) in so early a stage. The patient from whom the specimen was taken died, and he had an opportunity of examining the uterus. It was slightly distended, and contained that which appeared to be an ovum, and there was not at the first any reason to suppose that it was not in all respects in a normal state. It was covered by a decidua, which still adhered firmly to it, but which was separated from the uterus without difficulty. Upon opening the ovum, and making a very minute search, nothing resembling an embryo could be found; indeed it contained none. Upon examining the chorion the villi were found as numerous as usual, and closely impacted within the decidua, but upon setting them loose from each other, and noticing them under water, numerous minute vesicles were seen appended to their extremities. Upon examining the villi not having vesicles appended to them, the structure was seen to be exactly that of healthy villi; others were found to terminate by mere blunt extremities, or were at their termination bulbous in a greater or less degree; indeed, in all degrees, from mere slight enlargement of their ends to absolute globular cysts. In some instances from these cysts proceeded others, having long, and apparently thread-like peduncles, and from these second cysts elongations proceeded, forming thread-like peduncles, to which were appended still other cysts. In looking at the villi, even with the naked eye, there is no difficulty in recognising cysts resembling masses or bunches of uterine hydatids in a more advanced state. The society would perceive in the preparation nearly all that is seen in the healthy ovum prematurely cast off,—externally a decidua, next villi, and apparently the chorion; within this, again, another delicate membrane. In all these points it appeared to resemble very closely a healthy ovum. The points in which it differed from an healthy ovum were the absence of an embryo, on the one hand, and the existence of the vesicles formed at the extremities, and apparently formed of the extremities of the villi, on the other. Whether uterine hydatids are always the result of impregnation is a question which has been often mooted. As connected with forensic medicine it is one of great importance, and as affecting the character of women (independently of forensic inquiries) its importance is not less. According to present opinions entertained by physiologists of high standing, the ovum, prior to fecundation, passes out of the ovary into the Fallopian tube, there to receive the influence of the fecundating principle, an opinion maintained by Wharton Jones, and strongly corroborated by an example which Bischoff has adduced as the result of his observations on a bitch. It is stated that in this instance five ova were found in each Fallopian tube, and five corpora lutea in each ovary, under circumstances which *confirm* the doctrine of spontaneous exit of ovaries from the ovary, and on their arrival within the Fallopian tubes independently of impregnation. Hence Bischoff now affirms that ova come to maturity at more or less regular periods; that it is during the maturation of the ova in the ovaries that animals become salacious; that ova are *spontaneously* detached and passed into the Fallopian. Assuming these views to be true, that ova do undergo a ripening process in the ovary,—that they pass into the Fallopian tube still in a state of advancing maturity, *there* to receive the influence which may be said to create the new being, a question applicable to the subject of uterine hydatids still arises, whether, for example, the limit is with *certainty* ascertained, at which spontaneous growth of the constituent parts

of the mere ovum would cease? Whether, since it proceeds in active growth and in the acquirement of a certain advanced state in the ovary and in the Fallopian tube, and passes on into the uterus, to be finally cast off, as some physiologists maintain,—whether, having so arrived in the uterus, it may not, by possibility, be there retained, and proceed in an *imperfect growth?* Whether a process which commenced in the ovary, and was continued in the Fallopian tube, may not proceed still further in the uterus, and whether the constituent parts of the ovum are such that a structure consisting essentially of membrane and villi and globular cysts, may not be developed? The preparation before the society had the character of an ovum minus the embryo, minus exactly that which in normal pregnancy exists. On the other hand, we cannot doubt the possibility or the probability of an impregnated ovum being subject to total arrest of growth in its most essential part (the embryo), leaving the membranes to proceed in a course of abnormal development. This, indeed, *appears* to have occurred in the present case. So long, however, as the investigations he had adverted to led to the belief that ova spontaneously undergo changes and pass into their natural matrix under circumstances where impregnation has been impossible (as in the case supplied by Bischoff), and until similar investigations discover the limit at which, under such circumstances, development of the simple elements of the ovum must of necessity stop, it might be prudent not to pronounce as an indubitable fact, and an infallible certainty, that the formations called uterine hydatids *cannot* have existence in the human subject independently of impregnation. In these observations it is assumed that the rudiments of the chorion exist in the ovum, as an original and integral part, independently of all future and extraneous influence. The observations which he (Dr. Chowne) had ventured to offer to the society were not intended to assert the probability, nor, indeed, the absolute possibility, of a structure, such as that to which they refer, being the result of a spontaneous process, but rather to question whether, in the present state of our physiological knowledge, it would be entirely safe to pronounce, in the event of a forensic investigation, or in one where character is concerned, an unqualified and absolute negative.

MEDICAL SOCIETY OF LONDON.

Wednesday, October 23, 1843.

Mr. PILCHER, President.

DISCUSSION ON HYDATIDS.

AFTER the confirmation of the minutes, &c., the president suggested that Mr. Dendy should revert to the subject of hydatids.

Mr. DENDY remarked, that he felt there were great difficulties about the subject, the origin of hydatids being so uncertain, the parts in which they were formed so numerous, the difficulty of knowing of their existence so great, and the treatment so unsatisfactory. To state the different kinds of hydatids was more easy than to trace the particular circumstances that gave them birth; analogies could be traced between polypi and hydatids, yet distinctive differences were obvious, and there could be no doubt that they belonged rather to the animal than the vegetable kingdom. He considered that the most practical direction that could be given to the question was to treat it, as far as possible, in connection with the pathological conditions under which they most frequently occur, and the diseases and disorganisation to which they give rise. Almost every viscus of the body had been found the seat of hydatids; the solids contained them within their substance; the different cavities and canals of the body within their interior; and the investing and lining membranes adhering to their surface, or penetrating it and inserting themselves in the structure beneath. He thought a point of great interest was the peculiar diathesis favourable to the growth of hydatids, which appeared to be imparted to the constitution by certain diseases. The disease most noticed as imparting this diathesis was scrofula; but it was observed as a general rule that those diseases which either depended upon a low state of vitality, or induce a low state, were favourable to the growth of hydatids. He considered that in a medical society, such as that he addressed, the treatment was not of less interest than the natural history of the parasite; he was fearful that he could not contribute anything that was new; yet he had reason to believe that some of those medicines occasionally administered for the destruction of hydatids were not without efficacy. Acids, he believed, were beneficial, and a case had occurred under his own notice where hydatids had been passed from the bowels in large quantities under the use of the muriate of soda.

Mr. CRISP instanced, with regard to the muriate of soda, that it did not appear to be efficacious in preventing the growth of hydatids in animals; that marsh lands near the sea are impregnated by that salt from their vicinity to the ocean, yet it appeared that in such localities the inhabitants were peculiarly liable to the formation of hydatid cysts within the cranium and elsewhere. He agreed with Mr. Dendy that a low state of vitality in the system appeared to favour the growth of hydatids.

Mr. HOOPER, according to his experience, found it so difficult to determine or even to suspect upon rational grounds the existence of hydatids, that he considered the diagnosis of such cases worthy of especial attention,

in order that the remedies may be advantageously employed; but that in our present state of knowledge there existed but little opportunity for taking advantage of the means of destroying hydatids, however good. He cited a case occurring in his own practice of an enormous collection of hydatid cysts attached to the liver of a man, and distending the abdomen, so that he was supposed to have ascites.

Dr. Hughes Willshire expressed his opinion that the subject under discussion was one of great practical interest, and must continue to be so on many accounts, but especially in consideration of the doctrine advanced by a high authority, and not yet controverted, that the tubercles of phthisis have their origin in hydatid cysts. He did not intend to maintain that doctrine; indeed, he thought the stronger arguments were against it, but thought it deserving of consideration in the present discussion.

Dr. Risdon Bennett had paid great attention to the pathological condition of the lungs in early phthisis, and if there was any point in connection with pathological anatomy on which he felt confident, it was that tubercles do not originate in hydatids; it would be particularly interesting to him if any proofs could be adduced of the contrary doctrine.

Dr. Willshire said he had lately examined, with Dr. Chowne, some specimens of uterine cysts; he thought the difference between such cysts and true hydatids was very great indeed,—so great that they could not correctly be classed together.

Dr. Chowne had examined several specimens of uterine cysts, and did not consider that hydatids was strictly a proper name for them. Hydatids of the uterus had often been spoken of as degeneration of the placenta, but he had in his possession a preparation consisting of the amnion, the chorion, and its villi, in which cysts of the usual kind were abundant, but in which there was neither embryo nor placenta. Dr. Chowne stated, in reply to a question put by Dr. Waller, that he had never seen the cysts known as hydatids of the uterus except in instances where there had been the possibility of impregnation; he was disposed to suspend his opinion, however, as to whether they must of necessity be the result of impregnation until discoveries lately detailed, in regard to the physiology of the subject, had been confirmed.

Mr. Dendy related the case of a patient much advanced in years, and many years a widow, who passed, not long before her death, a bunch of hydatids, some of which were very large.

Mr. Headland and other gentlemen took part in the discussion.

CERTIFICATES TO STUDENTS.

To the Editor of The Lancet.

Sir,—I beg to direct attention to a most injurious system that is carried on at certain medical schools in Dublin, in order that they may be admonished in The Lancet. It is that of giving certificates to persons who never come up from the country to attend a lecture until they apply to get their certificates signed. I know many grocers' and druggists' boys, and such others, who have crept into the profession by sending up the money to the lecturers out of their salaries, and laughing at the "spoonies," as they call those students who take lodgings and attend lectures regularly. This requires to be stopped. This winter the lecturers are bound in conscience not to sign any student's ticket who has not regularly attended. Few of the lecturers in Dublin have such large classes that the faces of the students should not be familiar to them. I extract the following advertisement from one of the Irish newspapers:—

"Most Important Notice.

"To Medical Students.—The Association of Medical Lecturers in Dublin beg to call the attention of medical students to recent regulations of the College of Surgeons in London and Dublin, enacting that certificates of attendance upon lectures will not be received from candidates for the diploma of either college unless their names appear in the registers transmitted from their respective schools. Such registers are required to be transmitted to the colleges on the 25th of November."

This may serve in some measure to correct the evil. Your obedient servant,

A Medical Student.

October 21, 1843.

CRITICISM BY A CORRESPONDENT.

To the Editor.—Sir: Having purchased the whole of Tuson's expensive "Plates," I am not a little surprised and vexed (after recommendation so extravagant from critical reviewers) to find in them such a want of accuracy and clearness of delineation, but more especially in the plate which refers to the brain, of which the following are some of the most prominent discrepancies and errors:—

1. The paltry delineations of the cut blood-vessels on the centrum ovale of Vieussens, they being of all shapes but the proper one.
2. The hippocampus minor and posterior cornua are so delineated that, if illustration be worth notice, they are one and the same.
3. The thalami nervorum opticorum is described as oval, and illustrated as triangular.

4. Tænia semicircularis, described as white, coloured blue.

5. The description and the illustration of fornix are totally at variance with each other.

6. The pineal gland and its peduncles are described in the letterpress as white, while in the plate they are totally black.

7. The author has described the calamus scriptorius as being situated in the fourth ventricle, of which there is no illustration.

8. The circle of Willis, with anterior cerebral arteries, is so badly illustrated as not to require comment.

The above errors are so prominent that I have thought my copy might be spurious. If so, it is right that Mr. Tuson should know of the piracy, or take better care in the future genuine copies. I am, Sir, your constant subscriber,

AN ANATOMIST.

Swinton, near Rotherham,
Oct. 18, 1843.

PLAGUE PROPHYLACTICS AND REMEDIES.—Jackson, in his "History of the Commerce of the Mediterranean," says,—"The coolies or porters employed in the oil stores in the kingdom of Tunis seldom eat anything but oil and bread; they smear themselves all over with oil, and their coat is always well soaked with it. Though the plague rages frequently in Tunis in the most frightful manner, yet *there was never an instance of any of the coolies being affected.* We may remark that a similar kind of inunction has been proved by Europeans to be a valuable preservative against the pestilential fevers to which they have been exposed on the west coast of Africa, &c. Garlic, vinegar, opium, mercury, perfumes, and, by some, wine and strong liquors, have been vaunted as prophylactics against plague. Panadas, cordials, a light vegetable diet, and a strict regimen, are usually employed as means of cure. Broths are pernicious, and bleeding is almost always fatal. Indigo is said to be a preventive."—*Thornton's Turkey*, vol. ii.

M. TROUSSEAU ON URTICATION IN THE TREATMENT OF RUBEOLA.

IN a recent number of the "Journal de Medecine," after recalling the wise precepts of Sydenham, who advises not to use stimulants in the treatment of persons labouring under eruptive fevers, and not to keep them too warm, M. Trousseau remarks that, although these precepts are generally correct, we must not entirely proscribe the employment of local or external excitants when the exanthema has disappeared abnormally. He then states that in several instances he has resorted with great advantage to urtication, and gives the following case:—A young woman was received in his wards on the sixth day of a rubeola. The eruption was very intense, but on the day following her admission she was seized with very acute capillary bronchitis, and the eruption disappeared. Copious bleeding was resorted to without success, and the dyspnœa became so intense, the pulse was so small and frequent, that he despaired of her life. He then gave a sufficient dose of ipecacuanha to produce vomiting, and when she had recovered from the state of semi-syncope into which the vomiting had thrown her, he had her severely fustigated with nettles from the head to the feet. The effect was truly magical. In the course of a few hours after the remedy had been resorted to the oppression had ceased, the fever had nearly disappeared, and convalescence had commenced.

ENLARGED PROSTATE.

YOU may presume, in using the catheter, that the greater swelling of the gland is *under* the urethra, in which case, when the point of the catheter has arrived there, depress the hand to surmount the obstruction. But the *elastic gum catheter* requires less guidance, and glides past it. Use a full-sized instrument, as a *small* point may strike against the inequality, and injure or lodge in the membrane, and there the instrument may lodge, on every fresh introduction. Introduce the finger into the rectum if the obstruction persists; feel both the point of the catheter and the prostate, and direct the instrument higher and in the proper line. When the prostate gland is generally and greatly enlarged a larger catheter than usual is required to pass through the gland into the bladder.—*Sir Charles Bell.*

NEWS OF THE WEEK.

THE deaths in the metropolis during the week ending October 7th, amounted to 1056, or 13 more than in the week preceding. There was some increase in deaths from diseases of the brain and nervous system; in those from diseases of the lungs, digestive organs, and kidneys; from uncertain organic diseases; and from childbirth; and a material increase in deaths from natural decay (73 instead of 49, as in the week before); but a decrease in deaths from diseases of the heart and large vessels, and of the joints; from epidemic diseases (slight); and a considerable diminution in deaths by violence, &c. (23 instead of 41, as in the week before.) In the deaths from typhus there was a decrease of 2 as compared with the week preceding; those from diarrhœa and dysentery had also diminished slightly. Deaths from hooping-cough, 35; from measles, 39; and from small-pox, 8—in each case an increase over the week before, when the deaths

from those diseases were 28, 30, and 6, respectively; but there was a decrease in deaths from scarlatina, they being 43 instead of 54, as in the former week.

Dr. JOHN CALTHROP WILLIAMS, one of the Physicians to the Nottingham General Hospital, author of a work, published in 1836, on "Palpitations of the Heart," was recently elected Physician to the Nottingham Lunatic Asylum.

HAYMARKET THEATRE.—For steady good sense in matters of business there is no man like your middle-class Englishman. Talk to him of cottons or wines and you will find his head as clear as a mountain stream; but tell him that he looks apoplectic, or that his child has the pip, and you have him at your mercy at once. Only say that Anthony has told James that he has heard Stephen say that you had cured his grandmother, and he is yours for life. What marvel, then, that quack after quack rises up to gild his chariot at the expense of our credulity. What wonder that this intense gullibility has been catered to so often that the very concoctors of the falsehoods at length almost believe them. When we saw the announcement *Old Parr*, we exclaimed, "A new puff surely!" and so we found it,—Farren dressed the counterpart of the pill-box portrait—a walking puff—Farren degraded into a peripatetic advertiser *en costume*. Bad enough to see quackery lurking in every newspaper, every thoroughfare, placarded on every wall; but too bad to have it stare us in the face from a stage like the Haymarket, one of the chief actors of our time playing mountebank to a glaring quackery. If the sin pass unpunished, we may next expect to see Mr. Farren announced as Dr. Eady, or Mr. Webster enacting the cock that so long fought his own figure as reflected by Warren's blacking.—*Theatrical Critic.*

APOTHECARIES' HALL, LONDON.

NAMES of gentlemen who received certificates of qualification to practise as apothecaries, Thursday, Oct. 19, 1843:—Kirby Kittoe, London; Henry Dixon, London; John Hales, North Walsham, Norfolk.

The following names of gentlemen who obtained certificates on Thursday, Oct. 5, 1843, were accidentally omitted to be then published:—William Hitchins, Twerton, near Bath; Thomas Peregrine James, Abergavenny, Monmouthshire; Charles Cooper, Marsham, Norfolk.

BOOKS RECEIVED.

Posthumous Extracts from the Veterinary Records of the late John Field. Edited by his brother William Field, V.S. London: Longman and Co., 1843. 8vo, pp. 236.

Popular Cyclopædia of Natural Science (Animal Physiology). By Wm. B. Carpenter, M.D. London: Orr and Co., 1843. Pp. 579. With Engravings.

CORRESPONDENTS.

THE fourth lecture of Mr. LISTON on Diseases of the Bones and Joints, and the fourth lecture of Dr. LITTLE, will appear in the next number of THE LANCET.

We should have published the letter of *Mr. Snape*, of Stowmarket, perhaps with a few remarks, had our correspondent added the verdict, of which we are in total ignorance, and shown to us in what respect it was erroneous, or in what particular additional testimony would have legally required the jury to sign some other inquisition—one that would have been more consistent with the facts, certain or presumed; for all criticism on the proceedings would be a waste of words unless it could be shown that an incorrect verdict was returned. Even, however, the imperfect account that we have received inclines us to consider that a post-mortem examination of the body should have been made.

Medicus (of Cowes) wishes us to "caution the public against the penny almanacs wherein nostrums are recommended to be taken at particular times of the year, such almanacs being got up by the proprietors of the nostrums, and sold at a cheap rate, in order to obtain a sale for the trash which they style medicine."

Dr. Winn, of Truro, in a note to the Editor, dated Oct. 23rd, says, "Mr. Winter having, in his communication of Oct. 14, admitted my priority of claim to the views of animal heat recently published in THE LANCET, I take the earliest opportunity of stating that I am satisfied with his explanation."

The comments of *Dr. Martin Barry* are in the printer's hands for publication at the earliest opportunity that we are enabled to find space for them in our pages.

The essay on Spermatorrhœa received this week will be inserted in an early number.

The note of *Mr. Brookes* has been received. A proof of the case reported will be forwarded to our correspondent.

The letter of *Dr. Epps* on the "Prevalence of Eruptions" shall be inserted.

Mr. Moon's case of stridulous convulsions in infants shall appear next week.

We thank *Mr. Bates* for his polite letter and liberal proposal. By an early post he will receive from us a private letter.

Our printer has in type for insertion, if possible, in the next LANCET, the introductory lecture of Mr. Fergusson, at King's College, and that of Dr. Barlow, at Guy's Hospital, recently delivered.